

# Report on EPA Region 3 Project to Characterize the Extent of Children's Health Risk from Lead in the Region

Prepared by

EPA Region 3 Lead Program

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**David West and Staff** from Region 3 Information Management Resources Branch for many hours of physical mapping

The **Centers for Disease Control and Prevention** for provision of blood lead data and interpretation of that data

The **Region 3 States** for checking all the data and ensuring that representations of data in this project made sense

The **Philadelphia Department of Health** for provision of blood lead data and providing practical insight on childhood blood lead screening

The **Region 3 Lead Task Force** for setting the goals of this project and continuing to support the goals of the Region 3 Multi-Media Lead Reduction Plan

**Loren Hall**, EPA Office Of Pollution Prevention and Toxics for his expertise in predicting risks to children from lead paint

# INTENDED AUDIENCE FOR THIS REPORT

This report was prepared for use by state and local agencies involved with childhood lead poisoning issues. The information presented herein shows one way to characterize the childhood lead poisoning problem in Pennsylvania, Maryland, Delaware, Virginia, the District of Columbia, and West Virginia in order to assist the agencies and organizations in these states that are involved in addressing this childhood lead poisoning in targeting their efforts.

Some of the material is quite technical and may be difficult for those not involved with childhood lead poisoning programs and/or mapping efforts to understand. For more general information on lead, please see <http://www.epa.gov/opptintr/lead>

In September, 1995, the Region 3 Lead Task Force, which is comprised of individuals from each Division in Region 3, issued version 1 of the *EPA Region 3 Multi-Media Lead Reduction Plan*. In that Plan, the following long-term goal for the Region 3 Lead Task Force was presented:

*to characterize the human health risk from lead in Region 3 and reduce exposures to lead to reduce the incidences of blood lead levels greater than 10 ug/dL in children residing in targeted communities in Region 3.*

“Characterization” involves finding out the nature of the risk of childhood lead poisoning in Region 3. Once we have characterized the nature and extent of this risk, Region 3 Programs and the numerous partners involved in addressing childhood lead poisoning may use this information to better address the problem. This report provides a snapshot of the Region's continued efforts to characterize the human health risk from lead in Region 3.

We expect to continue to characterize the childhood lead poisoning risk in Region 3 with improved maps and more detailed analyses. Comments from the public on this report, and suggestions for improvement, may be sent to [Valls.Gerallyn@epamail.epa.gov](mailto:Valls.Gerallyn@epamail.epa.gov).

## REGIONAL MAPS AND CHARTS

## **1. Chart: Total Number of Affordable Housing Units Containing Lead-Based Paint (LBP) in Region III Compared to Number of Housing Units Containing LBP in Region III.**

More than three quarters of all units built before 1978, when the use of lead in residential paints was banned in the US, are believed to contain *some* LBP. Seven and one-half million housing units are estimated to contain some LBP in Region III.

LBP *hazards* are likely to be concentrated in

- housing that is in poor condition due to substantial deferred maintenance and has significant amounts of interior LBP. These housing conditions and exposure to other sources of lead, such as lead in bare soil, are the most likely explanation for the much higher prevalence rate of elevated blood lead levels in urban, poor, minority children living in older neighborhoods;
- housing maintained or renovated with unsafe work practices in which specialized, lead-specific cleaning was not subsequently conducted to remove lead dust.

Owners of economically distressed housing units have insufficient resources to make improvements; rental units that are economically distressed do not generate sufficient income to cover the costs of operation and maintenance, and tenants cannot afford rent increases to make improvements.

Of the 7.5 million units in Region III estimated to contain LBP, 4.3 million units are considered “affordable,” and are potentially high risk. “Affordable” is a term used in HUD's Comprehensive Affordable Housing Survey as a means to tally the number of housing units that are available for those with mid-to -low incomes. Actual definition of “affordable” is provided in legends in the maps included with this report.

**2. Chart: Table listing, by county and state, Number of Affordable Housing Units with LBP. Supporting documentation for Chart 1.**

Using the District of Columbia as an example, 116,584 housing units estimated to contain LBP are considered “affordable.”

### 3. Chart: **Number of Housing Units Estimated to Contain LBP** for Region 3's six largest cities and including Chester, PA.

This chart uses the same sources of data that are used in Chart 1 and Table 2, but focuses on cities in the Region because children in urban areas generally are considered at higher risk for lead exposure. [This **does not** mean that children outside urban areas do not have elevated blood lead levels! If a child lives in a home built before 1978 or spends a lot of time in facilities built before 1978, this child may be at risk.]

Out of the 7.5 million units with LBP in Region III, approximately one million units are in the cities listed in this chart. A half million of those units are in Philadelphia and a quarter million units are in Baltimore. These two cities have the greatest number of housing units expected to contain LBP in Region 3. [This still leaves approximately 6.5 million housing units with LBP **outside** the major cities in Region 3, so please have your child screened for lead if your family resides in a house built before 1978, even if you live outside the city!]

The District of Columbia is not included here as DC is included in the state analysis (Chart 1). With an estimated 220,650 housing units with LBP, DC is expected to have the third largest number of houses with LBP of all Region III cities.

Chester, PA was included in this analysis because Region

III has historically been involved in this “environmental justice “ community.



#### **4a. Chart: Comparison Between Number of Children in Major Cities in Region III that are Less than Six Years Old and Those Six-Year-Old Children Who are Below Poverty**

Lead usually affects the central nervous system most severely, so it is particularly harmful to the developing brain and nervous system of young children. Many effects of lead are irreversible and permanent. Therefore, this analysis focuses on children.

A total of 2.5 million children in Region 3 are less than six years old.

Of the children less than age six in Region III who reside in major cities, the greatest number reside in Philadelphia (136,597), Baltimore (67,942) and (not shown) the District of Columbia (47,835).

Of the children less than age six in Region 3 who are below poverty and who reside in major cities, the greatest number reside in Philadelphia (42,533) and Baltimore (22,650).

The rate of poverty among children under age six in the six cities depicted on this chart ranges from 27 percent (Wilmington) to 37 percent (Richmond).

#### **4b. Map: Percentage of Children in Region III that are Under Age Six and Below Poverty Level**

This map compares children under age six and below poverty between states in Region III. “Children,” as defined in the U.S. Census, means people under age 18. Therefore, this map shows that one to three percent of all children below age 18 in PA, DE, MD, VA, and WV are below age six and living below “poverty” as defined in the U.S. Census. “Poverty” status is defined by a set of money income thresholds that vary by family size and composition. For example, in 1995, a family of four, with two children under age 18 would be considered “below poverty” if family income was \$15,455 or lower.

The District of Columbia is the only “state” in Region III where ten percent of the children under age 18 and below poverty are also below age six. However, this percentage for DC should not be directly compared to that in chart 4a because the denominator used in chart 4a is all children under age 6 and that used in map 4b is all children under age 18.

### **5. Pennsylvania Maps:**

#### **5a: Housing Units Estimated to Contain LBP in PA.**

Out of the 7.5 million housing units in Region III with LBP, 3.6 million units are in PA.

## **5b: Number of Housing Units Containing LBP that are Affordable in PA**

Out of the 4.3 million units in Region III that are estimated to contain LBP and that are affordable, 2.3 million units -- roughly one-half of the 4.3 million units Region-wide -- are in PA.

## **5c: Number of Housing Units Containing LBP in Selected Cities in Pennsylvania**

This chart shows how many houses are expected to contain LBP in the next “tier” of cities in PA, after Philadelphia and Pittsburgh (which are already shown in Chart 3). The numbers of units expected to contain LBP drop dramatically compared to Philadelphia, which has about one-half million units with LBP, and Pittsburgh, which has about 133,000 units with LBP.

Note that “affordable housing” is not graphed for these cities. This is because the definition of “affordable,” as used by HUD, does not make any adjustments for changes in cost of living across different localities. Because living expenses in many of the cities listed in chart 5c are much lower than in the big cities, many housing units that would be included in “affordable” housing per HUD's definition may not actually represent units inhabited by low-to-moderate income families.

## **5d: Percent of Children Less Than Six Years Old Living in Pennsylvania**

Using Pike County as an example, 37 percent of the children less than 18 years old are under age six. Pike, Montgomery, Philadelphia, Delaware, Chester, Dauphin, Lancaster, Lehigh, Allegheny and Monroe counties have the highest percentages of children less than six years old in Pennsylvania.

## **5e: Percent of Children Below Poverty and Less Than Six Years Old Living in Pennsylvania**

Using Philadelphia as an example, 11 percent of the children below age 18 and below poverty are less than six years old. Philadelphia, Fayette, Greene, Venenago, Crawford, and McKean counties have the highest percentages of children less than age six and below poverty.

## **6. West Virginia Maps:**

### **6a: Housing Units Estimated to Contain LBP in WV.**

Out of the 7.5 million housing units in Region 3 with LBP, one-half million units are in WV. Kanawha County is expected to have the most houses with LBP in West Virginia.

### **6b: Number of Housing Units Containing LBP that are Affordable in WV**

Out of the 4.3 million units in Region III that are estimated to contain LBP and that are affordable, approximately one-third of a million units are in WV. Of these one-third of a million housing units, the largest percentage of units (about 47,000 units) with LBP that are affordable are in Kanawha County.

### **6c: Percent of Children Less Than Six Years Old Living in West Virginia**

Using Berkeley County as an example, 32 percent of the children less than 18 years old are under age six. Berkeley, Hardy, Pendleton, Wirt, and Pocahontas counties have the highest percentages of children less than six years old in West Virginia.

### **6d: Percent of Children Below Poverty and Less Than Six Years Old Living in West Virginia**

Using Clay County as an example, 17 percent of the children below age 18 and below poverty are less than six years old. Clay, Webster, and Lincoln counties have the highest percentages of children less than age six and below poverty in West Virginia.

## **7. Virginia Maps:**

### **7a: Housing Units Estimated to Contain LBP in VA.**

Out of the 7.5 million housing units in Region III with LBP, 1.6 million units are in Virginia. Fairfax County is expected to have more than twice as many houses (182,085) with LBP than any other county in Virginia.

### **7b: Number of Housing Units Containing LBP that are Affordable in VA.**

Out of the 4.3 million units in Region III that are estimated to contain LBP and that are affordable, approximately 0.8 million units are in Virginia. Of these 0.8 of a million housing units, the largest number of units (about 53,000 units) with LBP that are affordable are in Richmond.

### **7c: Percent of Children Less Than Six Years Old Living in Virginia**

Using Arlington County as an example, 40 percent of the children less than 18 years old are under age six. Arlington County has the highest percentage of children less than six years old in Virginia. Virginia cities with the highest percentage of children less than six years old include Alexandria, Norfolk, and Newport News.

## **7d: Percent of Children Below Poverty and Less Than Six Years Old Living in Virginia**

Using Richmond and as an example, 15 percent of the children below age 18 and below poverty are less than six years old. Additionally, 14 percent of children below age 18 and below poverty that reside in Petersburg and Northampton County are less than age six.

Please note that the denominator used in map 7d is all children under age 18. Compare this to that used in chart 4a, where 37 percent is identified as the poverty rate among children under age six in Richmond. The denominator used in chart 4a is all children under age 6, so the poverty rate in chart 4a is much higher than in chart 7d.

## **8. Maryland Maps:**

### **8a: Housing Units Estimated to Contain LBP in MD.**

Out of the 7.5 million housing units in Region 3 with LBP, 1,289,713 units are in Maryland (The 1,512,363 “total” figure on map 8a includes the District of Columbia). Aside from Baltimore City, Prince Georges County is expected to have the highest number of houses (199,761) with LBP than any other county in Maryland.

## **8b: Number of Housing Units Containing LBP that are Affordable in MD.**

Out of the 4.3 million units in Region 3 that are estimated to contain LBP and that are affordable, 631,354 units are in Maryland. (The 747,938 “total” figure on map 8b includes the District of Columbia). Of these 631,354 housing units and excluding Baltimore, the largest percentage of units (about 86,000 units) with LBP that are affordable are in Prince Georges County.

Prince Georges County has more than twice as many units expected to contain LBP that are affordable than any other Maryland county excluding Baltimore.

## **8c: Percent of Children Less Than Six Years Old Living in MD**

Using Montgomery County as an example, about 37 percent of the children less than 18 years old are under age six. Montgomery and Howard Counties have the highest percentage of children less than six years old in Maryland. Baltimore City also has a very high percentage of children less than six years old: 36%. However, in most counties in Maryland, over 30% of the children less than 18 years old also are under age six.

## **8d: Percent of Children Below Poverty and Less Than Six Years Old Living in Maryland**

Using Baltimore as an example, about 13 percent of the children below age 18 and below poverty are less than six



years old. Again, note that the denominator used in map 8d is all children under age 18 in Maryland; Chart 4a shows a poverty rate among children under age six in Baltimore as 33%, because the denominator used in chart 4a is all children under age six in Baltimore.

## **9. Delaware Maps:**

### **9a: Housing Units Estimated to Contain LBP in DE.**

Out of the 7.5 million housing units in Region III with LBP, about 0.2 million units are in Delaware. New Castle County is expected to have 65% of all the houses (i.e. about 122,000 houses) in Delaware with LBP.

### **9b: Number of Housing Units Containing LBP that are Affordable in DE.**

Out of the 4.3 million units in Region III that are estimated to contain LBP and that are affordable, approximately 90,000 units are in Delaware. Of these 90,000 housing units, approximately 70% are expected to be in New Castle County (about 60,000 units).

### **9c: Percent of Children Less Than Six Years Old Living in Delaware**

In each Delaware county, about 34 percent of the children less than 18 years old are under age six.

## **9d: Percent of Children Below Poverty and Less Than Six Years Old Living in Delaware**

Using Kent County as an example, about seven percent of the children below age 18 and below poverty are less than six years old.

## **10. District of Columbia Maps:**

### **10a: Housing Units Estimated to Contain LBP in DC.**

Out of the 7.5 million housing units in Region III with LBP, about one quarter million units are in DC. This map shows that houses expected to have LBP are generally found everywhere throughout the District.

### **10b: Number of Housing Units Containing LBP that are Affordable in DC.**

Out of the 4.3 million units in Region III that are estimated to contain LBP and that are affordable, approximately 177,00 units are in DC. This is more than in Delaware and West Virginia combined. Darkest colors in Southeast (along the Anacostia River) and Northern (near New Hampshire and Hobart Avenues) indicate that these areas may present the greatest risk of lead hazard in the District; i.e., the greatest numbers of housing units expected to have LBP and that are inhabited by low-to-moderate income residents (where housing may be deteriorated) are found in those deep gold census block

groups.

### **10c: Estimated Percent of Affordable Housing Units Containing LBP in District of Columbia**

From the dark pattern generally shown on the eastern side of this map, one may conclude that the greatest concentration of houses potentially posing the greatest lead hazards are generally in the eastern portion of the District. If one superimposed map 10c over other DC maps provided in this report, areas to target to for various LBP exposure prevention initiatives may be identified.

### **10d: Number of Children Less Than Six Years of Age Living in DC**

Darkest colors in Southeast (along the Anacostia River) and Northern (near New Hampshire and Hobart Avenues) areas indicate that these areas house the greatest numbers of children. This pattern is similar to that presented in map 10b, which shows where the greatest risk of lead hazard may exist in the District. Thus, areas shaded darkest not only show potential exposure from deteriorated LBP, but presence of a large number of human receptors (i.e., children).

### **10e: Percent of Children Below Poverty and Less Than Six Years Old Living in DC**

This map shows, by census block group, which DC neighborhoods house the greatest percentage of children

below poverty.

Note that many blocks colored brown or dark red on this map are also colored dark blue in map 10(c); i.e., the areas where there may be the highest concentration or high risk houses due to relatively old housing stock and relatively modest or poor income of residents (deepest blue in map 10c) are also the ones where the greatest number of children reside (dark brown and red in map 10d).

## **10f: Washington DC Owner-Occupied vs. Renter-Occupied Housing by Census Block Group**

This map shows which neighborhoods are mostly renter-occupied (blue) versus those neighborhoods mostly owner-occupied (gold). One area (pink) has an equal distribution of housing units that are renter-occupied and owner-occupied. If one superimposes this map over map 10b and/or map 10d, one finds that the areas posing the highest risk due to presence of LBP and possibly deteriorated housing (map 10b) and the areas where most children below poverty reside (map 10d) are areas where property is primarily renter-occupied.

### **Table 10g: Table Listing, by Block Group Number, Housing Units in DC that are Owner-Occupied and Renter-Occupied.**

- The first column indicates census block number.
- The second column lists number of units, for respective census block, that are owner-occupied.
- The third column lists number of units, for respective census block, that are renter-occupied.
- The fourth column lists percentage of renter-occupied units for respective census block group.
- The fifth column lists percentage of owner-occupied units for respective census block group.

Non-residential census block groups are excluded from this table.

- Total number of owner-occupied units in DC is 97,085.
- Total number of renter-occupied units in DC is 152,549.
- Total number of all housing units in DC is 249,634.
- Sixty-one percent of all housing units in DC are renter-occupied.

## **11. Blood Screening Data**

### **11a. Chart: Number of Children Under Age Six Compared to Those Screened for Lead by State** from July, 1994 through June, 1995.

Of the 2.5 million children under age six in Region III, 167,769 were screened between July 1994 and June, 1995 and results were reported. If these results are correct, 6.7 percent of children in the Region were screened during that reporting year. However, most states did not, during that period, require reporting to the State unless the results of blood lead screening were above a certain level. The level for reporting childhood lead levels in Region III states ranges from 0 (Maryland requires “universal reporting”) to 20 ug/dL. If this data is accurate, the percent of children screened compared to those residing in the Region ranges from three percent (West Virginia) to 61 percent (District of Columbia). Screening rates are generally higher in cities compared to states.

Please note that the 30,170 figure listed for children

screened in the District of Columbia may include children who were screened more than one time between July, 1994 and June, 1995. Therefore, the number of children screened during that period actually may be much lower than 30,170.

## **11b. Chart: Philadelphia Blood Screening Results - 1995.**

Results reported actually are for the period between July, 1994 and June, 1995.

Approximately 20 percent of children under age six in Philadelphia were screened during this reporting period. Of those screened, about 35 percent of the children were found to have blood lead levels above 10 mg/dL.

## **11c. Map: Blood Lead Levels of Children Residing in Philadelphia by Zip Code.**

The red areas shown on this map are areas where over 40 percent of the children who were screened for lead in their blood were found to have lead levels exceeding 10 mg/dL. City officials report that over 90 percent of the children tested in some neighborhoods in Philadelphia have elevated blood lead levels.

Areas in white represent areas where no data is available. In general, the Philadelphia Childhood Lead Poisoning Prevention Program targets its screening so that areas considered to be “high risk” are areas where children are screened more. In certain areas of Northeast Philadelphia, housing is relatively new so LBP is not expected to be present.

No level of lead in blood in children is considered “acceptable” and the current policy is to prevent any lead



exposure in children. However, the Centers for Disease Control and Prevention (CDC) recommends that health care providers attempt to educate care-takers of children who test above 10mg/dL lead in blood on how to prevent further lead exposure. For children found to have certain higher lead levels, CDC recommends additional actions.

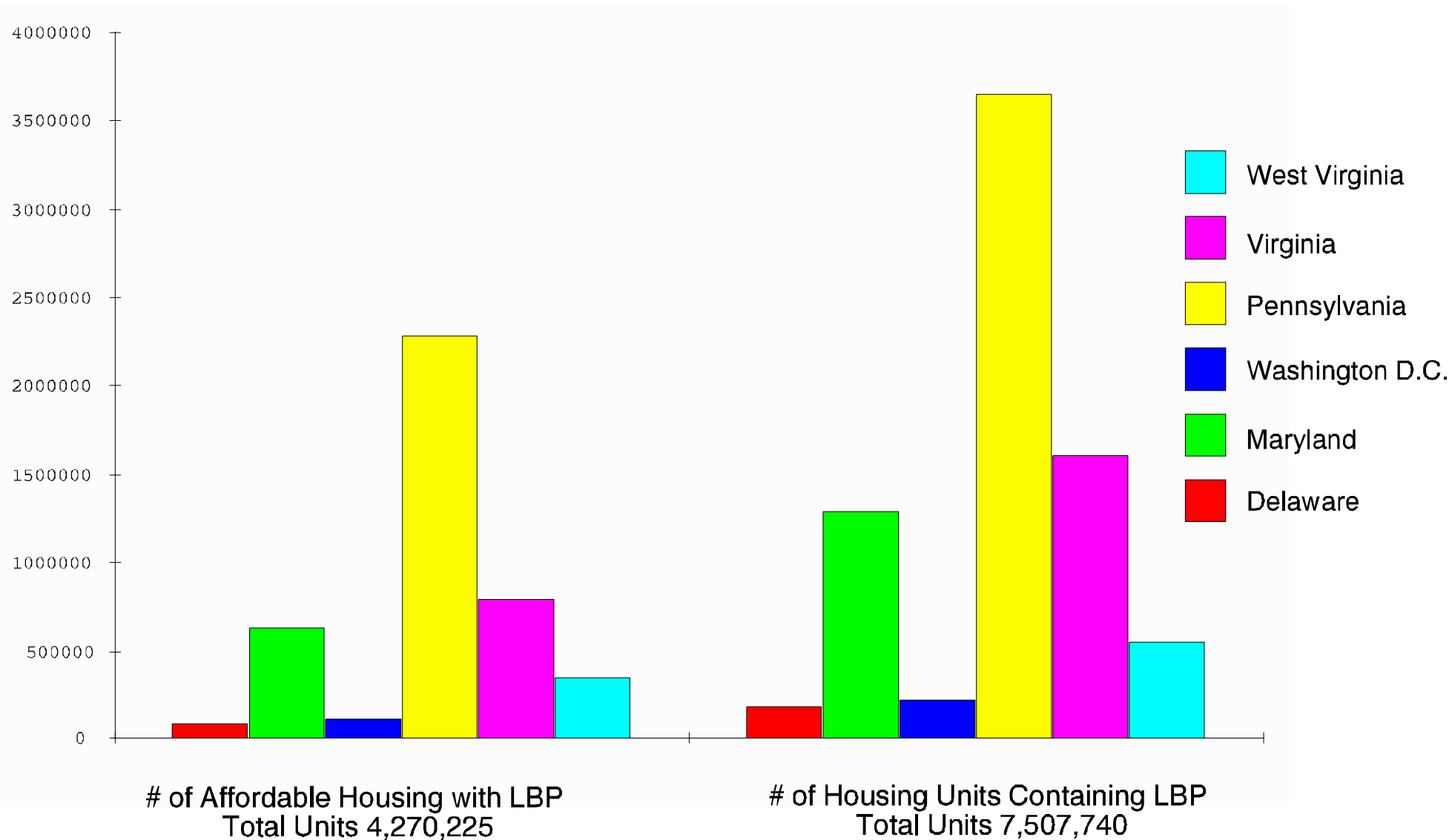
### **For Further Information...**

on EPA's efforts in preventing childhood lead poisoning in Region 3, contact the Lead Hotline at 1-800-424-LEAD;

on state and local efforts in Region 3 in preventing childhood lead poisoning, see.....

[http://www.epa.gov/reg3artd/indoor/ld\\_con.htm](http://www.epa.gov/reg3artd/indoor/ld_con.htm)

# Total Number Of Affordable Housing Units Containing Lead Based Paint (LBP) in Region III



"Affordable Housing Units with  
LBP, Listed by Region 3 State:  
Model 2; 11/5/96".

NUHULBPAF	NAME	FIPS
15625	Kent County	10001
59780	New Castle County	10003
14412	Sussex County	10005
89817	total	
116584	District of Columbia	11001
19954	Allegany County	24001
36210	Anne Arundel County	24003
110589	Baltimore County	24005
2822	Calvert County	24009
3802	Caroline County	24011
8902	Carroll County	24013
8766	Cecil County	24015
6126	Charles County	24017
5781	Dorchester County	24019
12939	Frederick County	24021
4782	Garrett County	24023
18131	Harford County	24025
8991	Howard County	24027
2519	Kent County	24029
35106	Montgomery County	24031
85793	Prince George's County	24033
3461	Queen Anne's County	24035
6360	St. Mary's County	24037
4035	Somerset County	24039
3972	Talbot County	24041
17712	Washington County	24043
11957	Wicomico County	24045
4855	Worcester County	24047
207789	Baltimore city	24510
631354	total	
11251	Adams County	42001
321936	Allegheny County	42003
16315	Armstrong County	42005
42053	Beaver County	42007
9690	Bedford County	42009
60618	Berks County	42011
31482	Blair County	42013

11152	Bradford County	42015
40126	Bucks County	42017
27874	Butler County	42019
40576	Cambria County	42021
1642	Cameron County	42023
12119	Carbon County	42025
17891	Centre County	42027
30866	Chester County	42029
8159	Clarion County	42031
18408	Clearfield County	42033
7927	Clinton County	42035
12290	Columbia County	42037
19366	Crawford County	42039
30494	Cumberland County	42041
53077	Dauphin County	42043
80061	Delaware County	42045
7753	Elk County	42047
59465	Erie County	42049
37965	Fayette County	42051
1182	Forest County	42053
20503	Franklin County	42055
2375	Fulton County	42057
8880	Greene County	42059
8715	Huntingdon County	42061
16075	Indiana County	42063
10569	Jefferson County	42065
3692	Juniata County	42067
42371	Lackawanna County	42069
59567	Lancaster County	42071
22710	Lawrence County	42073
22449	Lebanon County	42075
43326	Lehigh County	42077
72744	Luzerne County	42079
25385	Lycoming County	42081
11762	Mc Kean County	42083
28108	Mercer County	42085
10484	Mifflin County	42087
5141	Monroe County	42089
60524	Montgomery County	42091
3269	Montour County	42093
31388	Northampton County	42095
24070	Northumberland County	42097
7647	Perry County	42099
431114	Philadelphia city	42101
1450	Pike County	42103

3444	Potter County	42105
37428	Schuylkill County	42107
5975	Snyder County	42109
17143	Somerset County	42111
1103	Sullivan County	42113
5319	Susquehanna County	42115
8032	Tioga County	42117
4935	Union County	42119
14168	Venango County	42121
10912	Warren County	42123
45632	Washington County	42125
3683	Wayne County	42127
83394	Westmoreland County	42129
4179	Wyoming County	42131
54466	York County	42133
2285869	total	
6310	Accomack County	51001
7784	Albemarle County	51003
2658	Alleghany County	51005
1265	Amelia County	51007
4547	Amherst County	51009
2012	Appomattox County	51011
18148	Arlington County	51013
7782	Augusta County	51015
987	Bath County	51017
5526	Bedford County	51019
1170	Bland County	51021
3773	Botetourt County	51023
2974	Brunswick County	51025
5973	Buchanan County	51027
2031	Buckingham County	51029
7281	Campbell County	51031
2558	Caroline County	51033
5444	Carroll County	51035
1194	Charles City County	51036
2263	Charlotte County	51037
20275	Chesterfield County	51041
1251	Clarke County	51043
746	Craig County	51045
2932	Culpeper County	51047
1228	Cumberland County	51049
3482	Dickenson County	51051
3914	Dinwiddie County	51053
1290	Essex County	51057

25111	Fairfax County	51059
3249	Fauquier County	51061
2067	Floyd County	51063
1729	Fluvanna County	51065
5505	Franklin County	51067
4592	Frederick County	51069
3598	Giles County	51071
2510	Gloucester County	51073
1708	Goochland County	51075
3476	Grayson County	51077
1482	Greene County	51079
1747	Greensville County	51081
5920	Halifax County	51083
5720	Hanover County	51085
35847	Henrico County	51087
10489	Henry County	51089
459	Highland County	51091
2882	Isle of Wight County	51093
2314	James City County	51095
1039	King and Queen County	51097
1651	King George County	51099
1644	King William County	51101
1379	Lancaster County	51103
5159	Lee County	51105
3211	Loudoun County	51107
2740	Louisa County	51109
2676	Lunenburg County	51111
1458	Madison County	51113
1192	Mathews County	51115
5800	Mecklenburg County	51117
1209	Middlesex County	51119
10617	Montgomery County	51121
2120	Nelson County	51125
1162	New Kent County	51127
2649	Northampton County	51131
1554	Northumberland County	51133
2972	Nottoway County	51135
2975	Orange County	51137
3345	Page County	51139
3283	Patrick County	51141
10223	Pittsylvania County	51143
1620	Powhatan County	51145
2703	Prince Edward County	51147
3556	Prince George County	51149
10422	Prince William County	51153

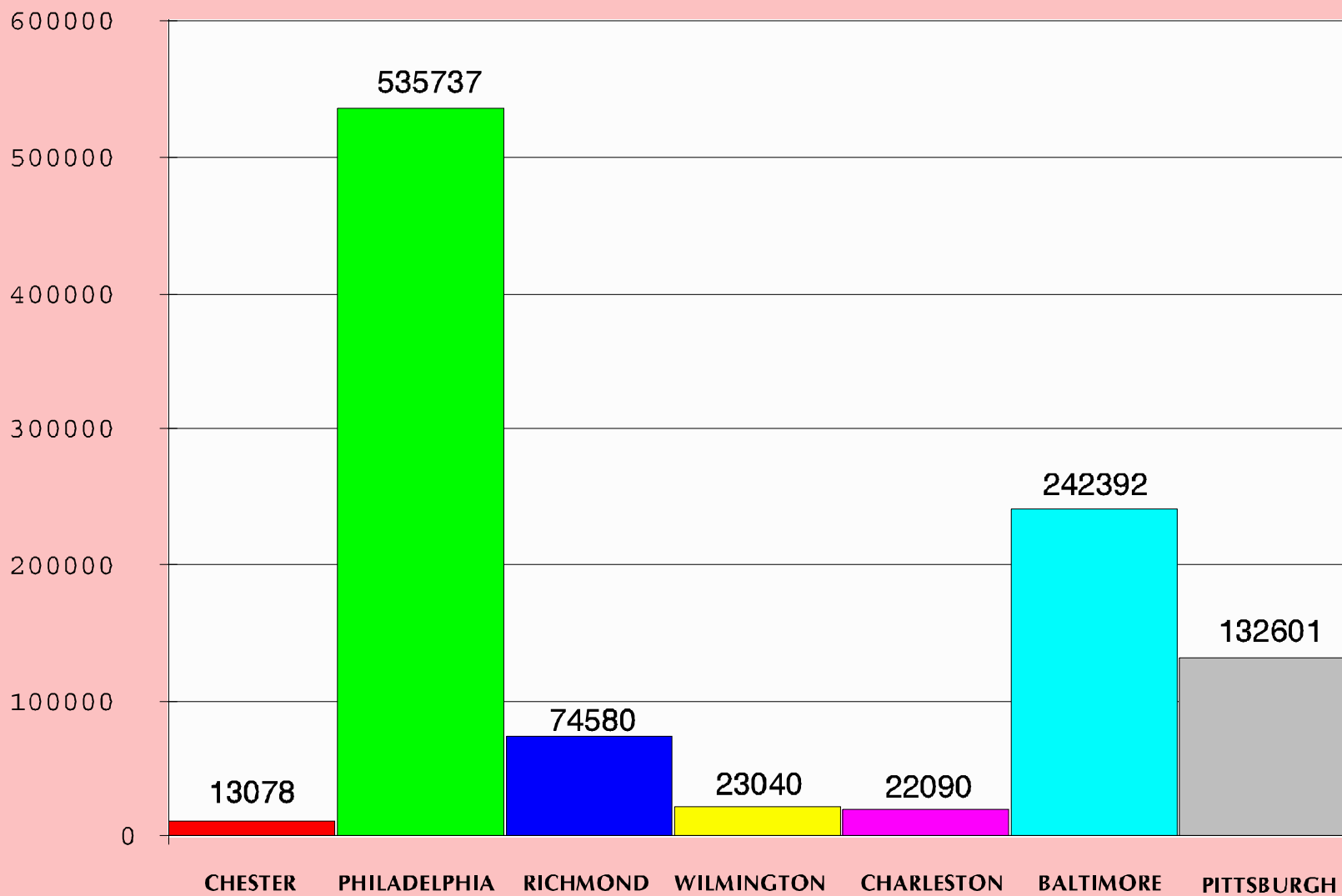
6915	Pulaski County	51155
782	Rappahannock County	51157
1032	Richmond County	51159
11424	Roanoke County	51161
3188	Rockbridge County	51163
8018	Rockingham County	51165
5662	Russell County	51167
4853	Scott County	51169
4163	Shenandoah County	51171
6738	Smyth County	51173
2780	Southampton County	51175
4369	Spotsylvania County	51177
3833	Stafford County	51179
954	Surry County	51181
1963	Sussex County	51183
9121	Tazewell County	51185
3509	Warren County	51187
7717	Washington County	51191
2167	Westmoreland County	51193
7758	Wise County	51195
4889	Wythe County	51197
3405	York County	51199
12915	Alexandria city	51510
1224	Bedford city	51515
4257	Bristol city	51520
1506	Buena Vista city	51530
8347	Charlottesville city	51540
13733	Chesapeake city	51550
1291	Clifton Forge city	51560
3511	Colonial Heights city	51570
2126	Covington city	51580
14023	Danville city	51590
1112	Emporia city	51595
798	Fairfax city	51600
444	Falls Church city	51610
1530	Franklin city	51620
3016	Fredericksburg city	51630
1547	Galax city	51640
19657	Hampton city	51650
3393	Harrisonburg city	51660
5889	Hopewell city	51670
1212	Lexington city	51678
13526	Lynchburg city	51680
1637	Manassas city	51683
615	Manassas Park city	51685

3796	Martinsville city	51690
24736	Newport News city	51700
44332	Norfolk city	51710
922	Norton city	51720
9716	Petersburg city	51730
576	Poquoson city	51735
21041	Portsmouth city	51740
2232	Radford city	51750
53379	Richmond city	51760
27081	Roanoke city	51770
4774	Salem city	51775
1489	South Boston city	51780
4866	Staunton city	51790
7648	Suffolk city	51800
25151	Virginia Beach city	51810
3529	Waynesboro city	51820
1290	Williamsburg city	51830
3800	Winchester city	51840
798469	total	
3089	Barbour County	54001
7842	Berkeley County	54003
4766	Boone County	54005
2382	Braxton County	54007
6455	Brooke County	54009
19716	Cabell County	54011
1574	Calhoun County	54013
1833	Clay County	54015
1332	Doddridge County	54017
10301	Fayette County	54019
1348	Gilmer County	54021
1587	Grant County	54023
6548	Greenbrier County	54025
2235	Hampshire County	54027
8910	Hancock County	54029
1821	Hardy County	54031
13580	Harrison County	54033
3944	Jackson County	54035
4512	Jefferson County	54037
46738	Kanawha County	54039
3319	Lewis County	54041
3660	Lincoln County	54043
7501	Logan County	54045
8778	McDowell County	54047
12614	Marion County	54049



8215	Marshall County	54051
4803	Mason County	54053
12437	Mercer County	54055
5425	Mineral County	54057
5577	Mingo County	54059
13759	Monongalia County	54061
2032	Monroe County	54063
1705	Morgan County	54065
4548	Nicholas County	54067
11661	Ohio County	54069
1239	Pendleton County	54071
1332	Pleasants County	54073
1655	Pocahontas County	54075
4559	Preston County	54077
6350	Putnam County	54079
14077	Raleigh County	54081
4724	Randolph County	54083
2178	Ritchie County	54085
2772	Roane County	54087
2811	Summers County	54089
3147	Taylor County	54091
1423	Tucker County	54093
1916	Tyler County	54095
3504	Upshur County	54097
7605	Wayne County	54099
2179	Webster County	54101
3790	Wetzel County	54103
991	Wirt County	54105
19690	Wood County	54107
5643	Wyoming County	54109
348132	total	
4270225	total	

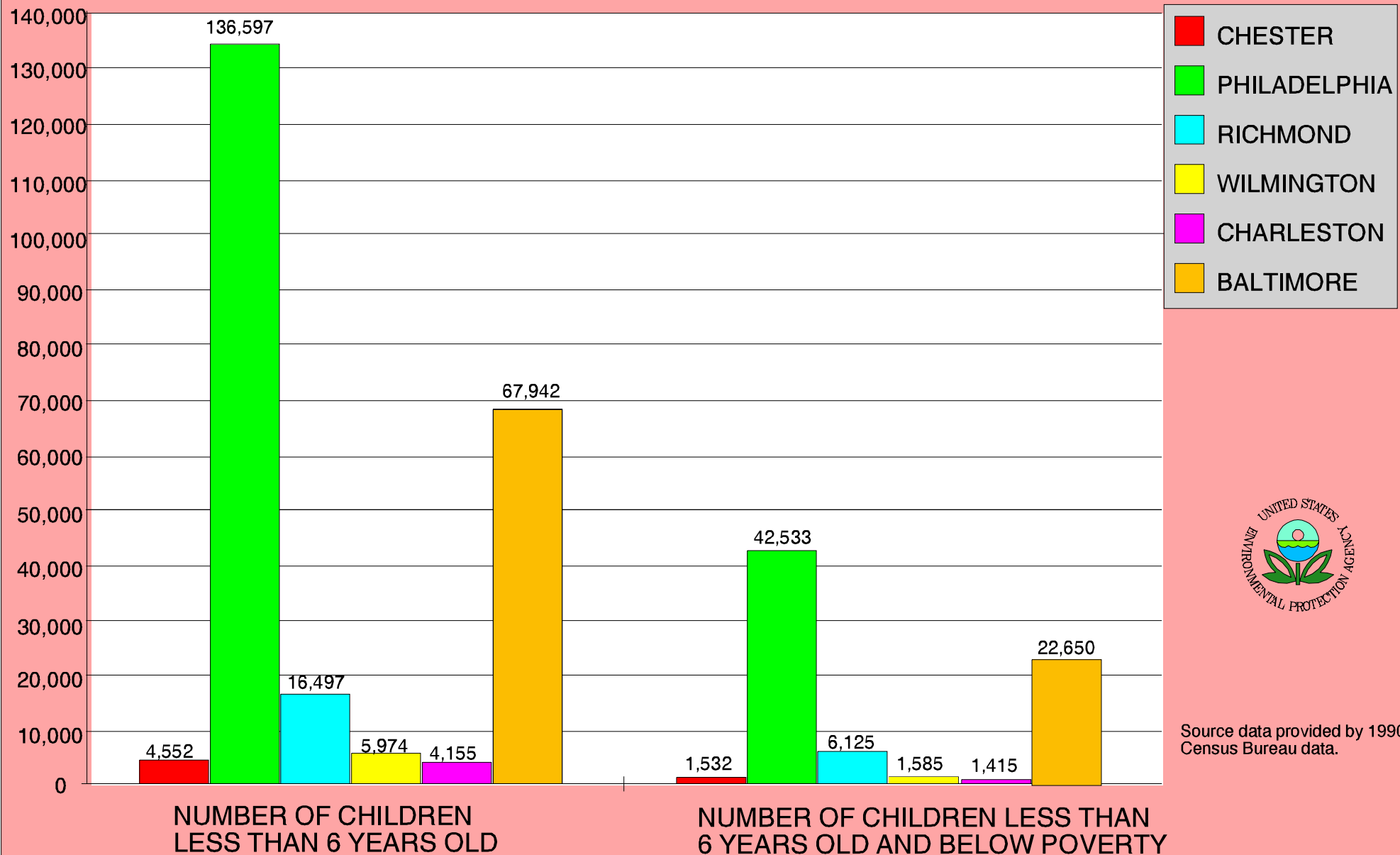
# NUMBER OF HOUSING UNITS ESTIMATED TO CONTAIN LEAD BASED PAINT



Source provided by 1990 Census Bureau data.

Estimated number of housing units containing lead based paint =  
(# of housing units before 1940  
\*.88 + housing 1940-1960 \*  
.92 + housing units 1961-80 \* .76)

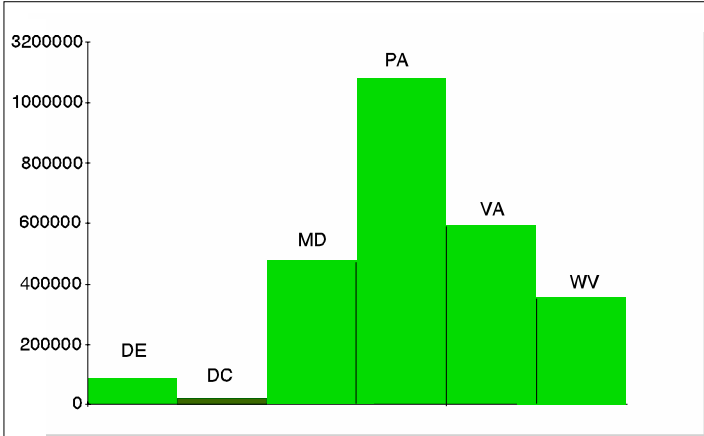
# COMPARISON BETWEEN CHILDREN LESS THAN 6 YEARS OLD AND THOSE 6 YEAR OLD CHILDREN WHO ARE BELOW POVERTY



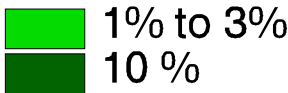
Source data provided by 1990  
Census Bureau data.

# Percentage of Children Under Age Six and Below Poverty Level

# of Childern < Age 6



Total Number of Childern < Age 6: 2,483,150

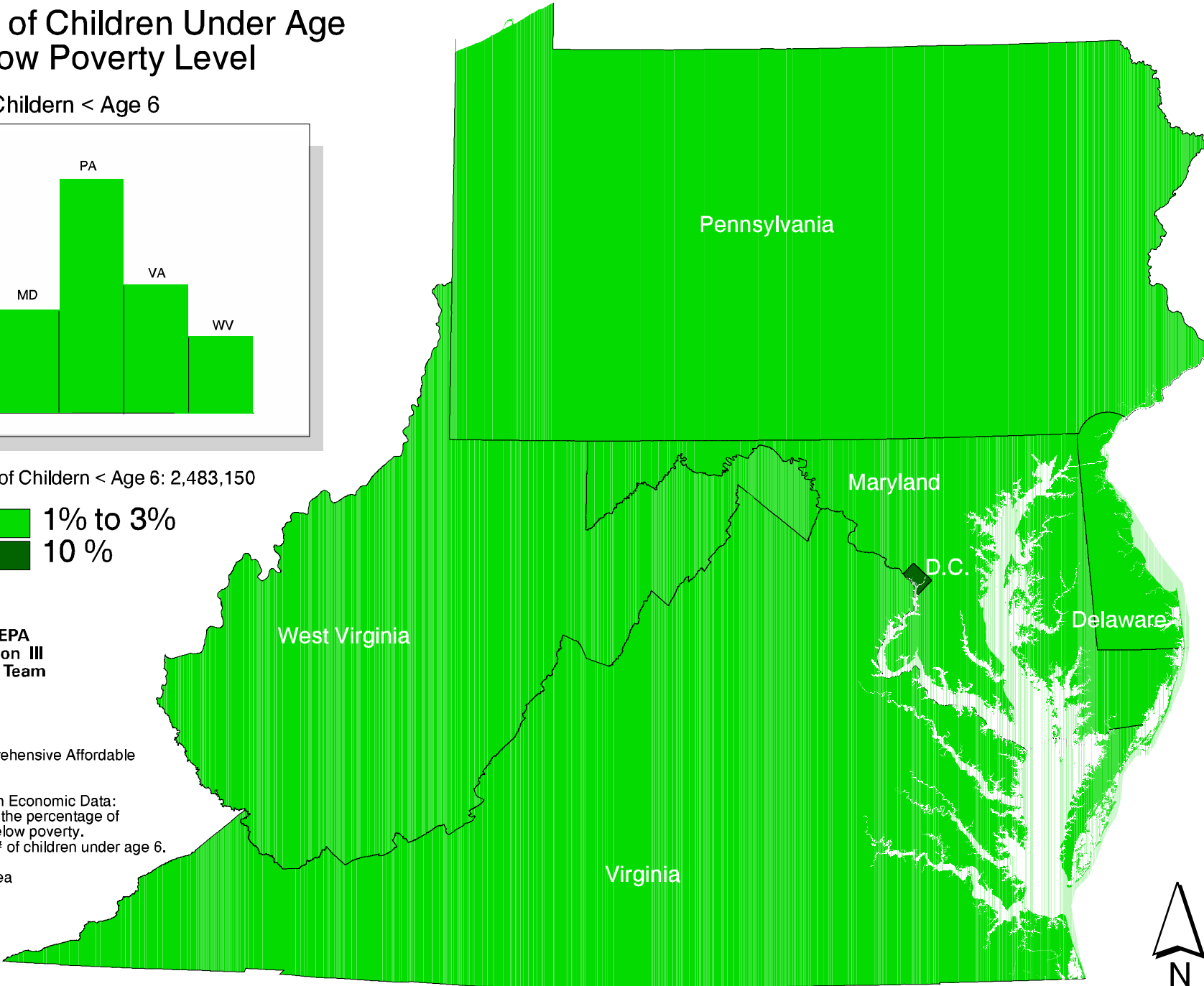
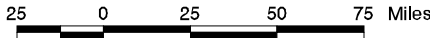


US EPA  
Region III  
GIS Team

Data Source: HUD's Comprehensive Affordable Housing Strategy (CHAS)

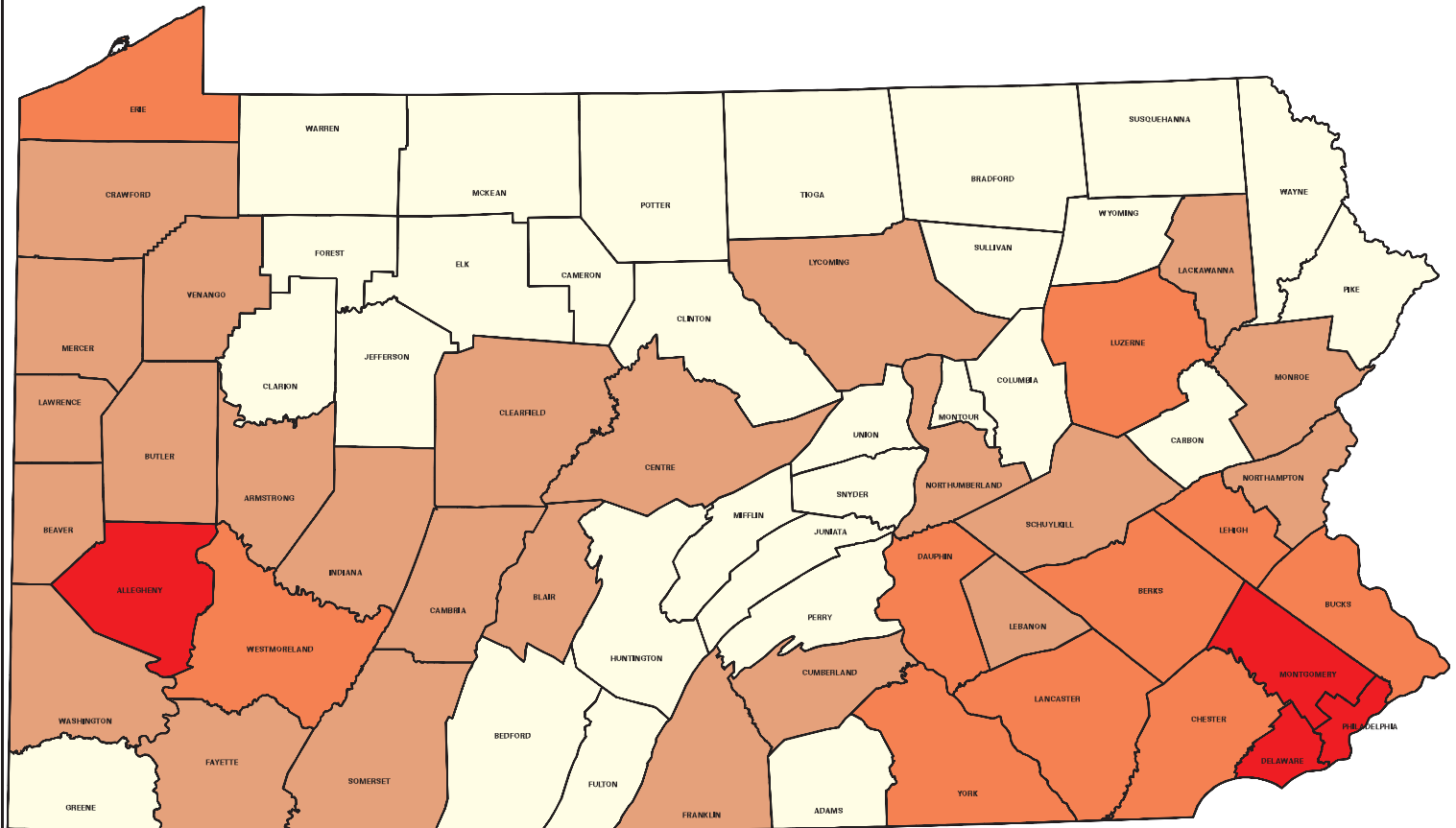
1990 Bureau of Census with Economic Data:  
Summary of tape file 3A for the percentage of  
children under age 6 and below poverty.  
Summary Tape File 1A for # of children under age 6.

Projection: Albers Equal Area  
Date: March 6, 1996



# Housing Units Estimated to Contain Lead Based Paint in Pennsylvania

County	Number
PHILADELPHIA	535,737
ALLEGHENY	454,966
MONTGOMERY	195,429
DELAWARE	169,039
BUCKS	139,794
WESTMORELAND	116,637
LANCASTER	104,534
LUZERNE	104,131
BERKS	96,469
YORK	93,868
CHESTER	89,604
LEHIGH	85,923
ERIE	81,456
DAUPHIN	75,891
NORTHAMPTON	68,236
LACKAWANNA	68,152
WASHINGTON	63,061
BEAVER	60,686
CUMBERLAND	53,201
CAMBRIA	51,964
SCHUYLKILL	49,345
FAYETTE	45,795
BUTLER	42,044
BLAIR	40,653
MERCER	37,271
LYCOMING	36,373
FRANKLIN	33,548
LEBANON	32,328
CENTRE	31,378
NORTHUMBERLAND	31,249
CRAWFORD	30,259
LAWRENCE	30,241
MONROE	28,142
SOMERSET	25,746
INDIANA	24,928
CLEARFIELD	24,611
ARMSTRONG	23,719
VENANGO	20,081
ADAMS	19,913
BRADFORD	18,871
COLUMBIA	18,410
CARBON	18,289
PIKE	16,814
WAYNE	16,482
WARREN	16,359
MCKEAN	15,880
JEFFERSON	15,511
BEDFORD	15,493
MIFFLIN	14,625
HUNTINGTON	13,789
SUSQUEHANNA	13,210
CLARION	13,060
TIOGA	12,755
CLINTON	12,340
ELK	12,239
GREENE	11,782
PERRY	11,410
SNYDER	9,239
UNION	8,873
WYOMING	8,401
POTTER	7,813
FOREST	6,149
JUNIATA	6,000
MONTOUR	4,623
FULTON	4,305
SULLIVAN	3,663
CAMERON	3,427
Total	3,646,214



0 10 20 30 40 50 60 70 80 90 100



Miles

## KEY

	Less than 20,000
	20,000 to 69,999
	70,000 to 149,999
	150,000 to 535,737



Source: HUD's Comprehensive Affordable Housing Strategy data.  
Portions of CHAS data were created from U.S. Census data.  
CHAS data does not contain seasonal and college dormitory units.

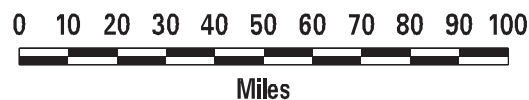
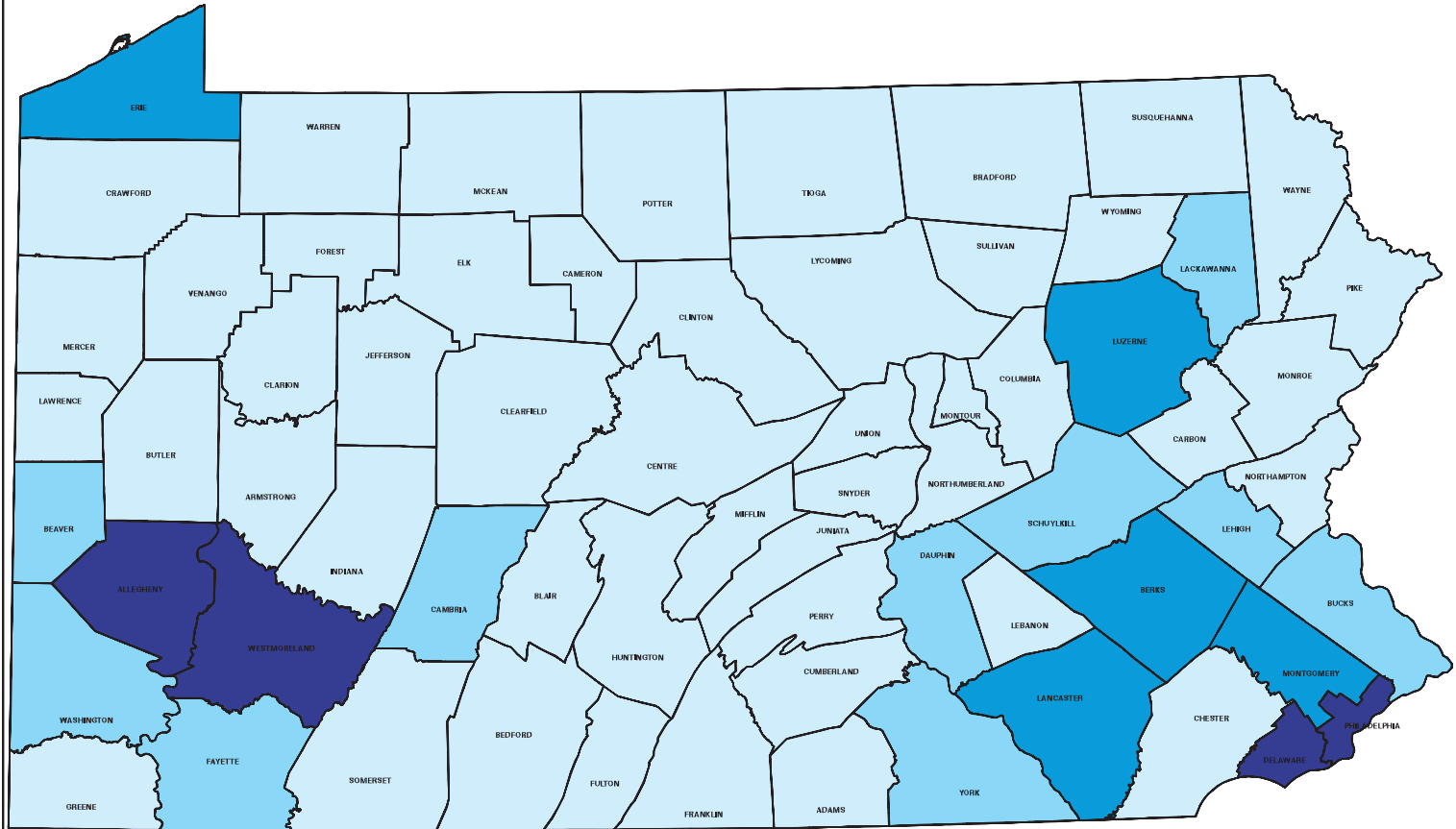
Estimated % of housing units with LBP = (# of housing units before 1940 \* .88 + housing 1940-60 \* .92 + housing units 1961-80 \* .76) / total housing units.

Projection: Albers Equal Area



# Number of Housing Units Containing Lead Based Paint that are Affordable in Pennsylvania

County	Number
Philadelphia City	431114
Allegheny County	321936
Westmoreland County	83394
Delaware County	80061
Luzerne County	72744
Berks County	60618
Montgomery County	60524
Lancaster County	59567
Erie County	59465
York County	54466
Dauphin County	53077
Washington County	45632
Lehigh County	43326
Lackawanna County	42371
Beaver County	42053
Cambria County	40576
Bucks County	40126
Fayette County	37965
Schuykill County	37428
Blair County	31482
Northampton County	31388
Chester County	30866
Cumberland County	30494
Mercer County	28108
Butler County	27874
Lycoming County	25385
Northumberland County	24070
Lawrence County	22710
Lebanon County	22449
Franklin County	20503
Crawford County	19366
Clearfield County	18408
Centre County	17891
Somerset County	17143
Armstrong County	16315
Indiana County	16075
Venango County	14168
Columbia County	12290
Carbon County	12119
Mc Kean County	11762
Adams County	11251
Bradford County	11152
Warren County	10912
Jefferson County	10569
Mifflin County	10484
Bedford County	9690
Greene County	8880
Huntingdon County	8715
Clarion County	8159
Tioga County	8032
Clinton County	7927
Elk County	7753
Perry County	7647
Snyder County	5975
Susquehanna County	5319
Monroe County	5141
Union County	4935
Wyoming County	4179
Junata County	3692
Wayne County	3683
Potter County	3444
Montour County	3269
Fulton County	2375
Cameron County	1642
Pike County	1450
Forest County	1182
Sullivan County	1103
Total	2,285,869



## KEY

	Less than 32,000
	32,000 to 55,999
	56,000 to 79,999
	80,000 to 431,114



Source: HUD's Comprehensive Affordable Housing Strategy data.  
Portions of CHAS data were created from U.S. Census data.  
CHAS data does not contain seasonal and college dormitory units.

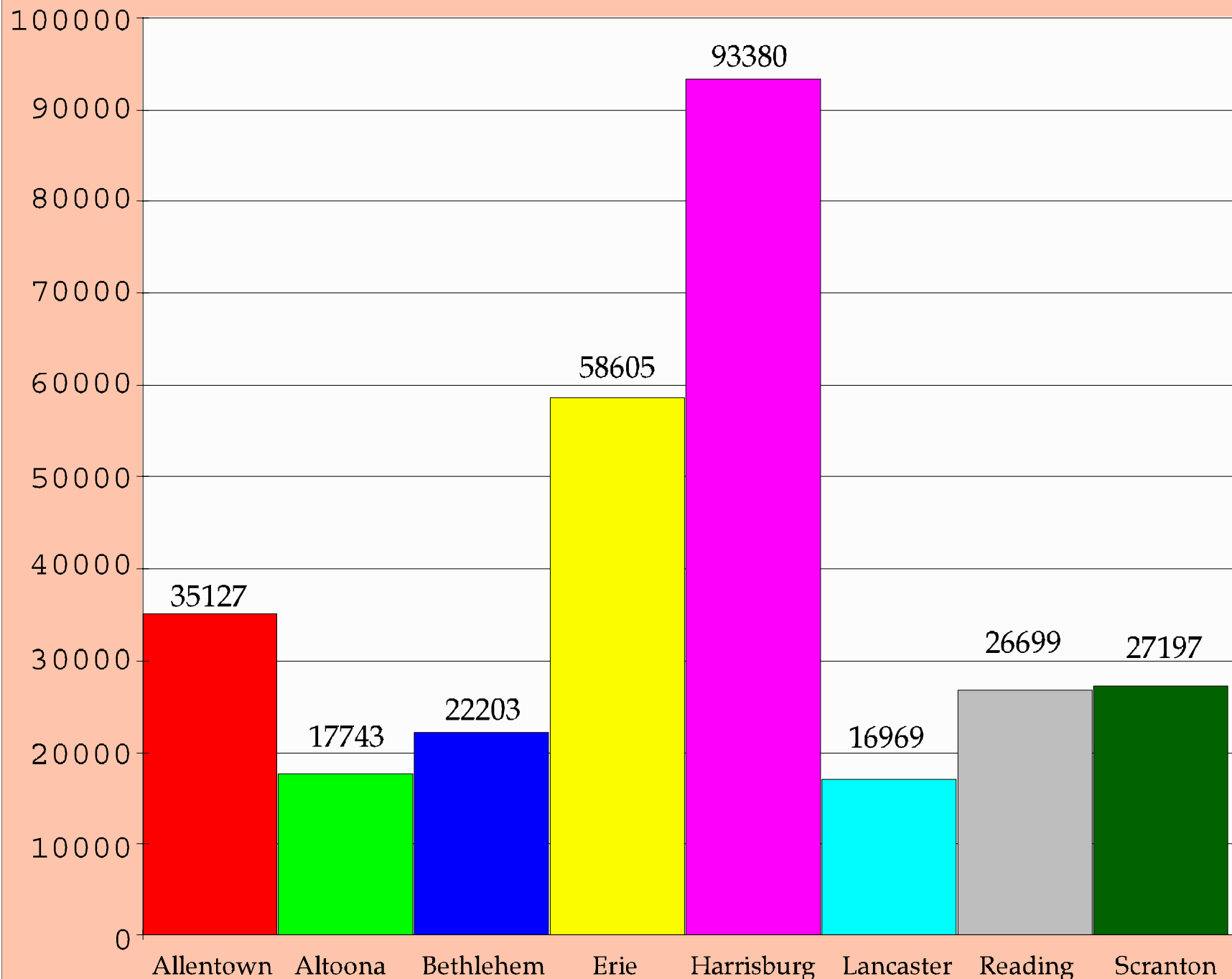
Estimated % of housing units with LBP =  $(\# \text{ of housing units before } 1940 \times .88 + \text{housing } 1940-60 \times .92 + \text{housing units } 1961-80 \times .76) / \text{total housing units}.$

Estimated number of affordable housing units with LBP =  $\# \text{ affordable housing units} \times \% \text{ of housing units with LBP}.$   
Estimated affordable housing units = sum of renter and owner occupied units for which household income was less than \$ 35,000 and housing costs accounted for less than 30% of household incomes.

Projection: Albers Equal Area



# Number of Housing Units Containing Lead Based Paint in Selected Cities in Pennsylvania

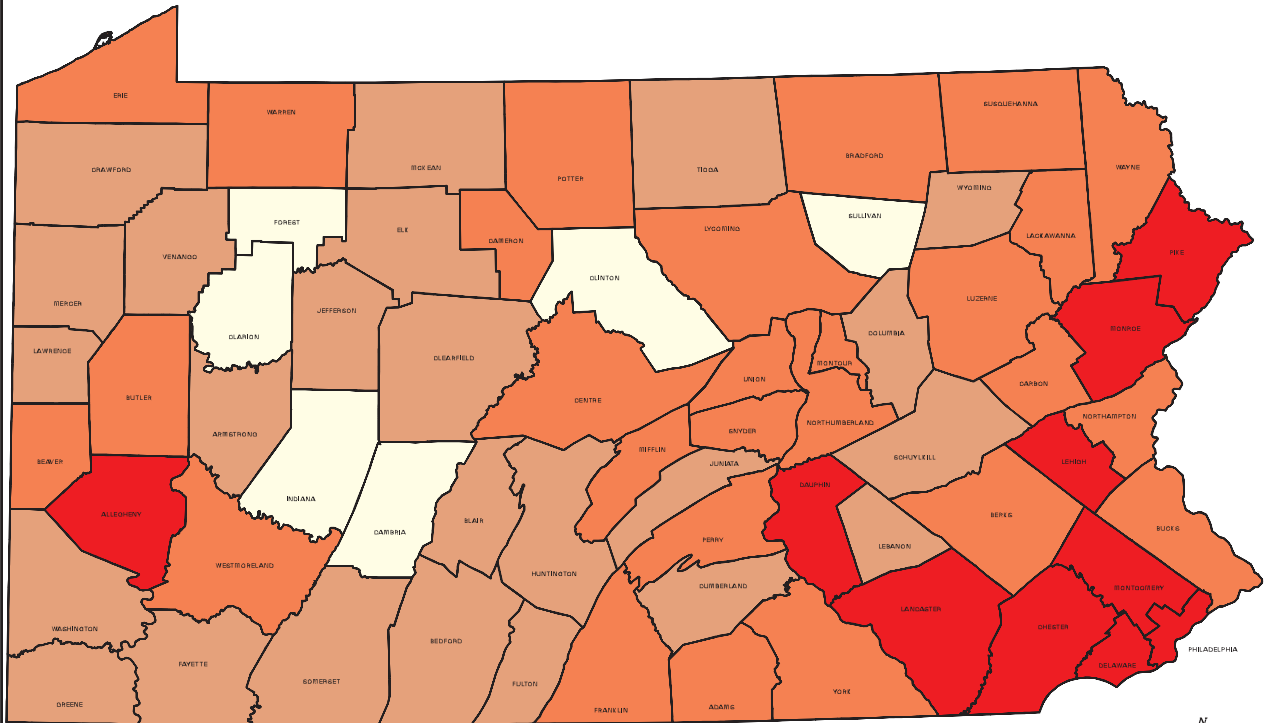


Source: HUD's Comprehensive Affordable Housing Strategy data. CHAS data was created from the U.S. Census data. CHAS data does not contain seasonal and college dormitory units.

Estimated number of housing units with LBP = (# of housing units before 1940 \* .88 + housing units 1940-60 \* .92 + housing units 1961-80 \* .76)

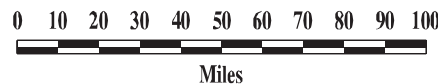
# Percent of Children Less Than 6 Years Old Living in Pennsylvania

County	Percent
PIKE	0.3685
MONTGOMERY	0.3420
PHILADELPHIA	0.3404
DELAWARE	0.3388
CHESTER	0.3359
DAUPHIN	0.3351
LANCASTER	0.3347
LEHIGH	0.3333
ALLEGHENY	0.3330
MONROE	0.3325
BUCKS	0.3277
MONTGOMERY	0.3268
SNYDER	0.3248
BERKS	0.3244
YORK	0.3230
NORTHAMPTON	0.3206
ADAMS	0.3187
CENTRE	0.3167
MIFFLIN	0.3148
CAMERON	0.3147
PERRY	0.3129
LYCOMING	0.3125
LACKAWANNA	0.3124
CARBON	0.3123
SUSQUEHANNA	0.3119
ERIE	0.3107
NORTHUMBERLAND	0.3107
BRADFORD	0.3089
BUTLER	0.3088
WARREN	0.3083
FRANKLIN	0.3079
LUZERNE	0.3076
POTTER	0.3074
UNION	0.3074
WESTMORELAND	0.3070
WAYNE	0.3063
BEAVER	0.3061
LEBANON	0.3045
ELK	0.3035
FULTON	0.3020
CUMBERLAND	0.3018
HUNTINGTON	0.3015
MCKEAN	0.3003
JUNIATA	0.2984
MERCER	0.2982
LAWRENCE	0.2971
SCHUYLKILL	0.2956
WASHINGTON	0.2937
JEFFERSON	0.2932
COLUMBIA	0.2930
CLEARFIELD	0.2929
CRAWFORD	0.2925
ARMSTRONG	0.2911
BLAIR	0.2911
VENANGO	0.2908
SOMERSET	0.2903
WYOMING	0.2895
GREENE	0.2891
FAYETTE	0.2876
BEDFORD	0.2867
TIOGA	0.2837
CLARK	0.2767
CAMBRIA	0.2762
INDIANA	0.2757
CLINTON	0.2737
FOREST	0.2701
SULLIVAN	0.2516



## KEY

Values in Percent
Less than 28
28.00 to 30.49
30.50 to 32.99
33.00 to 36.85

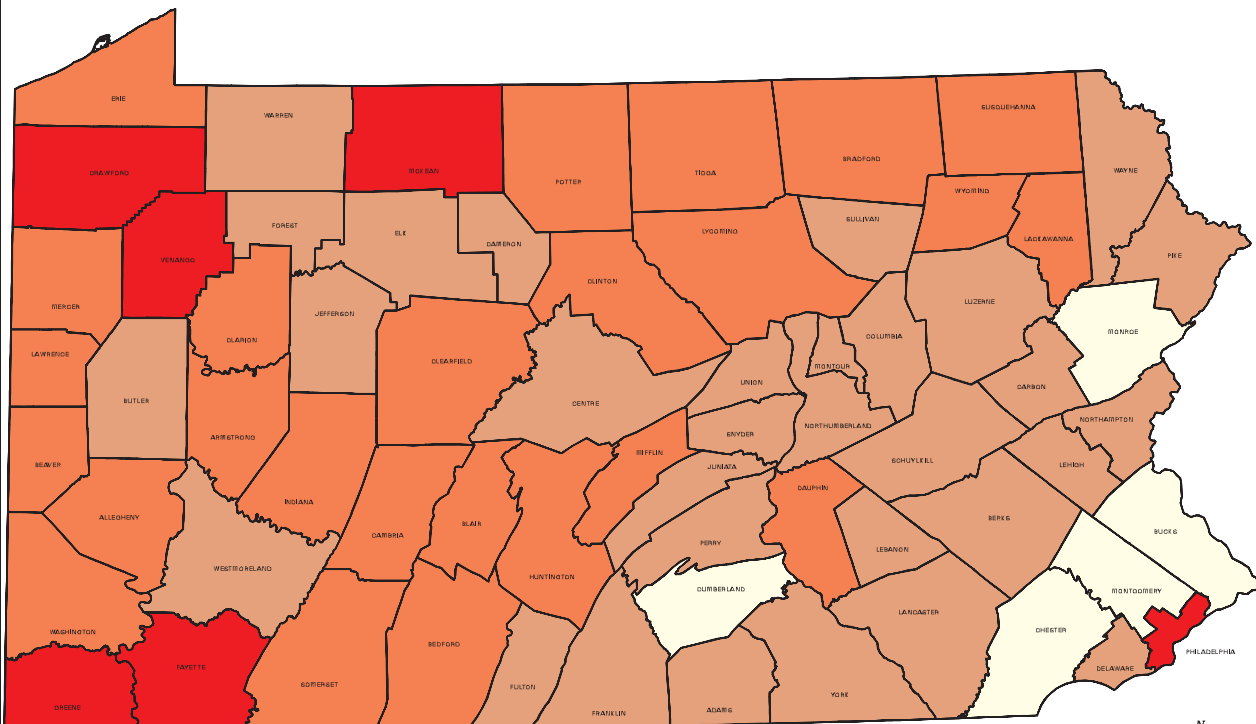




# Percent of Children Below Poverty and Less Than 6 Years Old Living in Pennsylvania

County Percent

PHILADELPHIA	0.1145
FAYETTE	0.1108
GREENE	0.1040
VENANGO	0.0869
CRAWFORD	0.0850
MCKEAN	0.0833
BEAVER	0.0793
TIOGA	0.0789
CLINTON	0.0778
POTTER	0.0768
MERCER	0.0764
LAWRENCE	0.0758
CLARION	0.0748
ERIE	0.0747
MIFFLIN	0.0741
INDIANA	0.0738
BLAIR	0.0734
CAMBRIA	0.0733
WYOMING	0.0696
ALLEGHENY	0.0671
SOMERSET	0.0660
CLEARFIELD	0.0653
HUNTINGDON	0.0650
BEDFORD	0.0642
DAUPHIN	0.0638
SUSQUEHANNA	0.0637
LYCOMING	0.0632
WASHINGTON	0.0626
LACKAWANNA	0.0614
BRADFORD	0.0612
ARMSTRONG	0.0601
LUZERNE	0.0596
JEFFERSON	0.0596
WESTMORELAND	0.0586
NORTHUMBERLAND	0.0586
SNYDER	0.0576
SULLIVAN	0.0575
UNION	0.0566
WAYNE	0.0538
MONTOUR	0.0524
CARBON	0.0522
WARREN	0.0511
FRANKLIN	0.0504
JUNIATA	0.0500
LANCASTER	0.0484
CENTRE	0.0478
SCHUYLKILL	0.0474
BUTLER	0.0461
LEHIGH	0.0460
FULTON	0.0454
COLUMBIA	0.0437
BERKS	0.0433
LEBANON	0.0428
ADAMS	0.0421
FOREST	0.0401
PIKE	0.0385
NORTHAMPTON	0.0368
CAMERON	0.0361
DELAWARE	0.0353
YORK	0.0339
PERRY	0.0330
ELK	0.0327
MONROE	0.0287
CHESTER	0.0212
CUMBERLAND	0.0205
BUCKS	0.0173
MONTGOMERY	0.0145



**KEY**

Values in Percent  
Less than 3.00



3.00 to 5.99



6.00 to 7.99



8.00 to 11.45



0 10 20 30 40 50 60 70 80 90 100

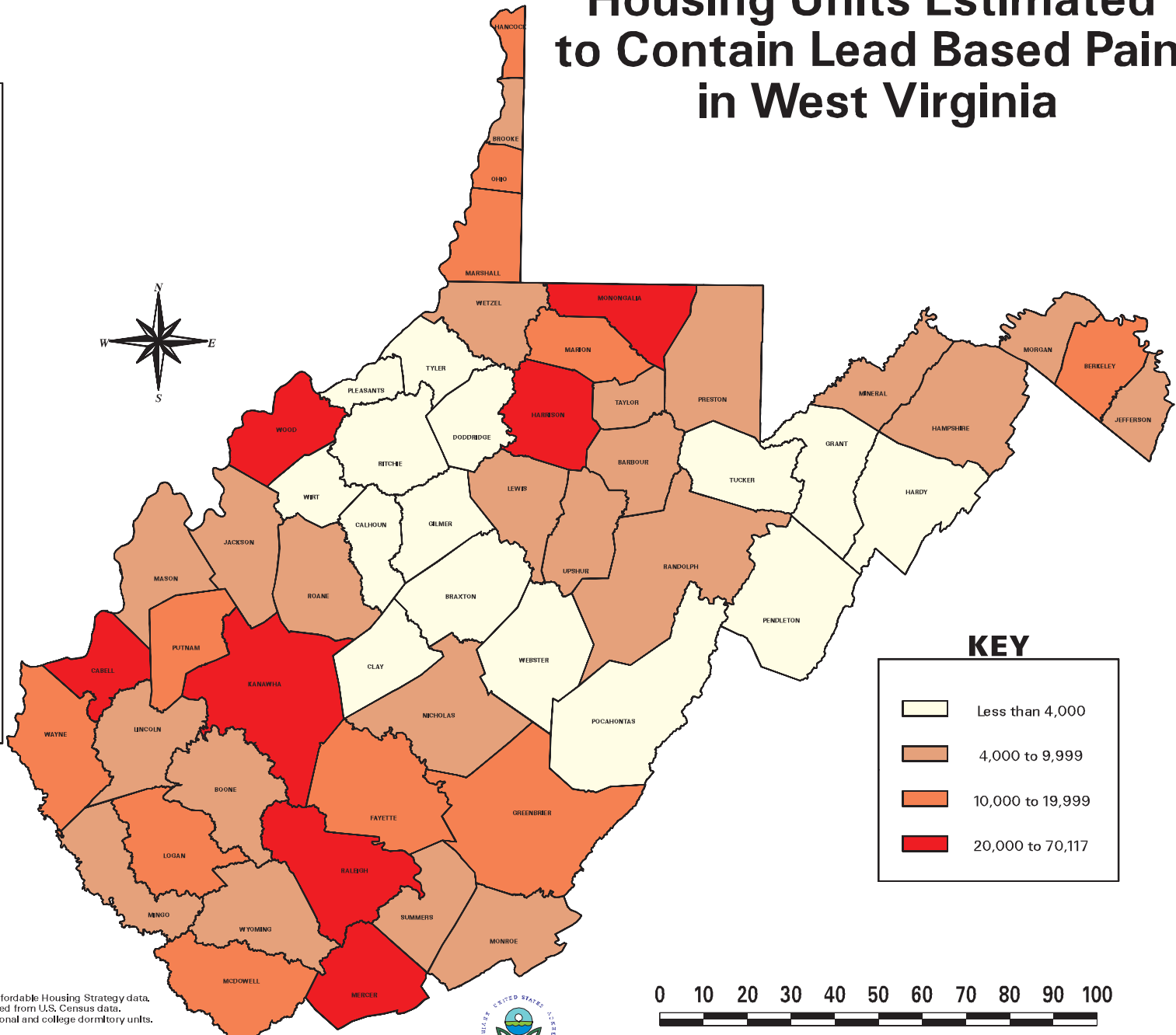


Miles



# Housing Units Estimated to Contain Lead Based Paint in West Virginia

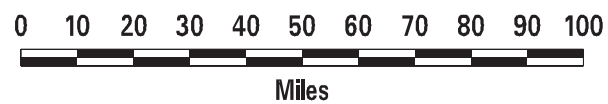
County	Number
KANAWHA	70,117
CABELL	32,535
WOOD	28,099
RALEIGH	23,711
HARRISON	21,949
MONONGALIA	21,637
MERCER	20,478
MARION	18,772
OHIO	17,675
FAYETTE	15,274
BERKELEY	14,281
GREENBRIER	11,897
WAYNE	11,775
HANCOCK	11,773
MARSHALL	11,735
LOGAN	11,594
MCDOWELL	11,338
PUTNAM	10,454
JEFFERSON	8,844
MINGO	8,612
RANDOLPH	8,533
WYOMING	8,393
BROOKE	8,335
MASON	7,951
PRESTON	7,941
NICHOLAS	7,606
MINERAL	7,413
BOONE	7,395
JACKSON	7,191
UPSHUR	6,374
WETZEL	5,783
LINCOLN	5,709
HAMPSHIRE	5,344
LEWIS	5,143
SUMMERS	4,835
BARBOUR	4,803
TAYLOR	4,660
ROANE	4,388
MONROE	4,110
MORGAN	4,004
BRAXTON	3,849
POCAHONTAS	3,763
WEBSTER	3,415
MITCHELL	3,375
HARDY	3,335
TYLER	3,127
PENDLETON	2,833
GRANT	2,816
CLAY	2,705
TUCKER	2,472
CALHOUN	2,343
GILMER	2,233
DODDGE	2,190
PLEASANTS	2,188
WIRT	1,926
Total	551,031



Source: HUD's Comprehensive Affordable Housing Strategy data. Portions of CHAS data were created from U.S. Census data. CHAS data does not contain seasonal and college dormitory units.

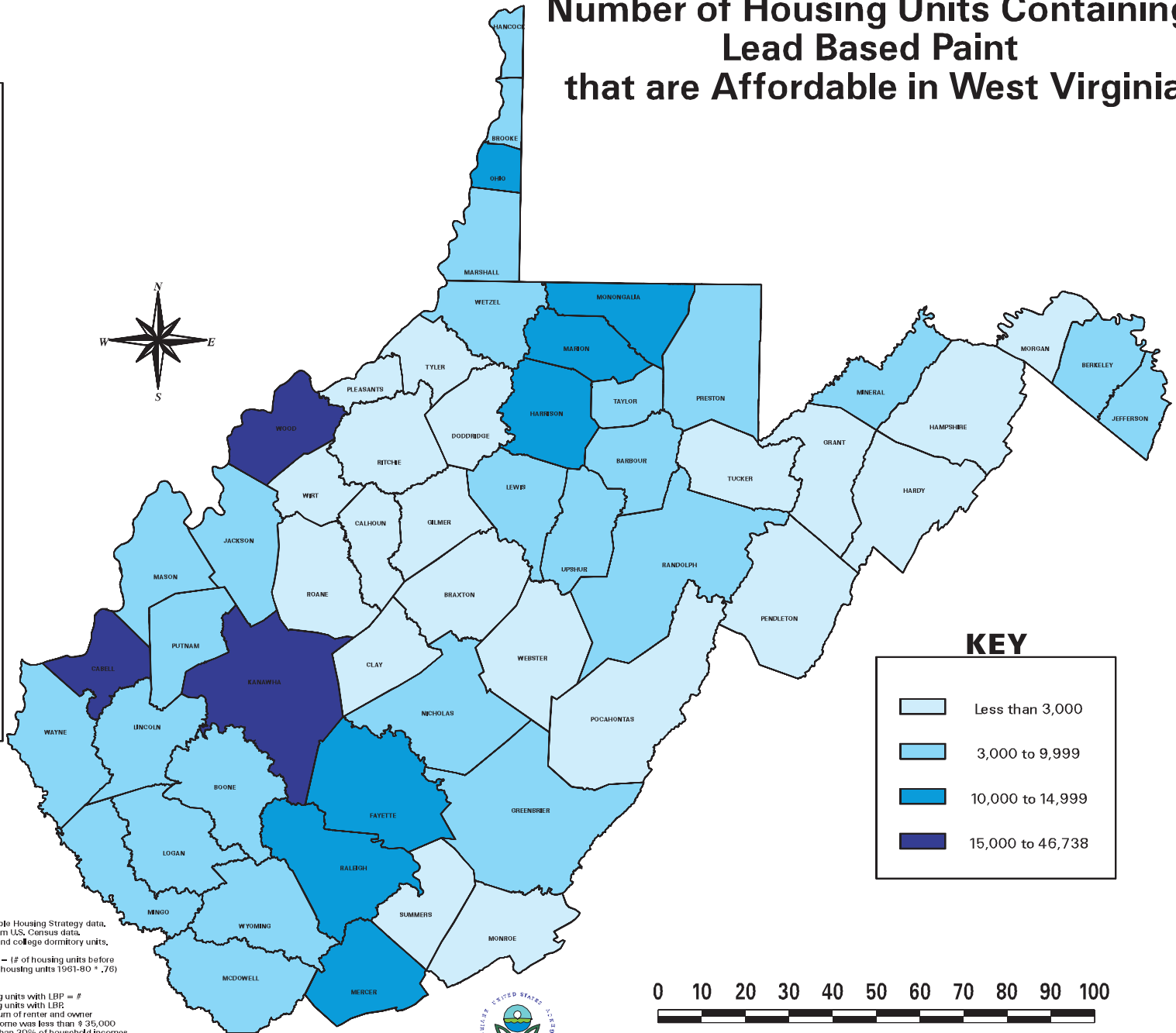
Estimated % of housing units with LBP =  $(\# \text{ of housing units before } 1940 \times .88 + \text{housing } 1940\text{-}60 \times .92 + \text{housing units } 1961\text{-}80 \times .76) / \text{total housing units}$ .

Projection: Albers Equal Area



# Number of Housing Units Containing Lead Based Paint that are Affordable in West Virginia

County	Number
Kanawha County	46738
Cabell County	19716
Wood County	19690
Raleigh County	14077
Monongalia County	13759
Harrison County	13580
Marion County	12614
Mercer County	12437
Ohio County	11661
Fayette County	10301
Hancock County	8910
McDowell County	8778
Marshall County	8215
Berkeley County	7842
Wayne County	7605
Logan County	7501
Greenbrier County	6548
Brooke County	6455
Putnam County	6350
Wyoming County	5643
Mingo County	5577
Mineral County	5425
Mason County	4803
Boone County	4766
Randolph County	4724
Preston County	4559
Nicholas County	4548
Jefferson County	4512
Jackson County	3944
Wetzel County	3790
Lincoln County	3660
Upshur County	3504
Lewis County	3319
Taylor County	3147
Barbour County	3089
Summers County	2811
Roscoe County	2772
Braxton County	2382
Hampshire County	2235
Webster County	2179
Richie County	2178
Monroe County	2032
Tyler County	1916
Clay County	1833
Hardy County	1821
Morgan County	1705
Pocahontas County	1655
Grant County	1587
Calhoun County	1574
Tucker County	1423
Gilmer County	1348
Doddridge County	1332
Pleasant County	1239
Pendleton County	991
Wirt County	991
Total	348,132



## KEY

- Less than 3,000
- 3,000 to 9,999
- 10,000 to 14,999
- 15,000 to 46,738

0 10 20 30 40 50 60 70 80 90 100



Miles

Source: HUD's Comprehensive Affordable Housing Strategy data. Portions of CHAS data were created from U.S. Census data. CHAS data does not contain seasonal and college dormitory units.

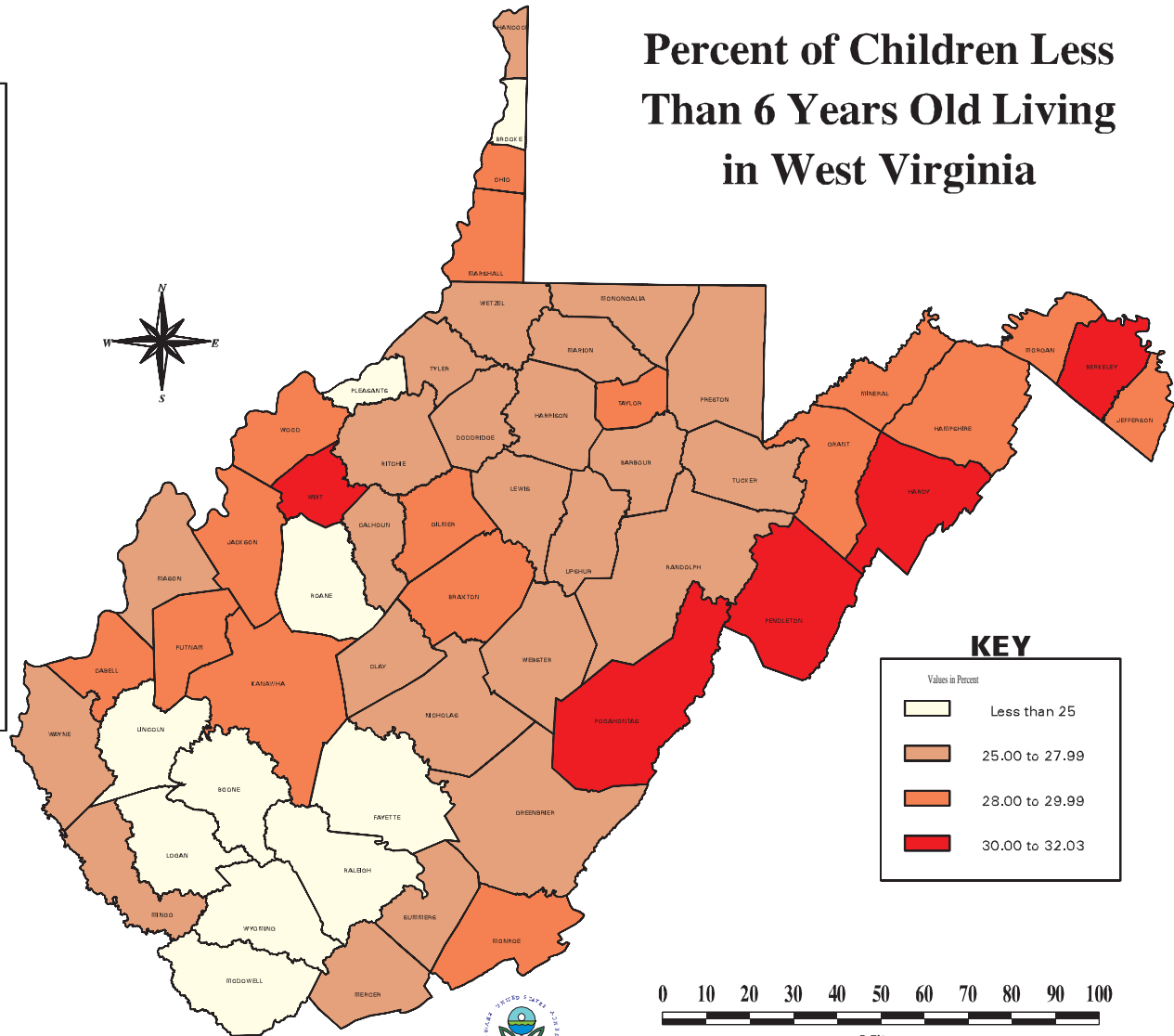
Estimated % of housing units with LBP =  $(\# \text{ of housing units before } 1940 \div \# \text{ of housing units } 1940-60 \times .92 + \text{ housing units } 1961-80 \times .76) / \text{total housing units}$ .

Estimated number of affordable housing units with LBP =  $\# \text{ affordable housing units} \times \% \text{ of housing units with LBP}$ .  
Estimated affordable housing units = sum of renter and owner occupied units for which household income was less than \$35,000 and housing costs accounted for less than 30% of household incomes.



# Percent of Children Less Than 6 Years Old Living in West Virginia

County	Percent
BERKELEY	0.3203
HARDY	0.3125
PENDLETON	0.3110
WIRT	0.3046
POCAHONTAS	0.3015
MONROE	0.2997
TAYLOR	0.2993
BRAXTON	0.2983
JEFFERSON	0.2962
OHIO	0.2952
WOOD	0.2932
MINERAL	0.2932
HAMPSHIRE	0.2890
PUTNAM	0.2881
KANAWHA	0.2874
GRANT	0.2868
GILMER	0.2866
MORGAN	0.2846
JACKSON	0.2844
MARSHALL	0.2841
CABELL	0.2812
UPSHUR	0.2791
MONONGALIA	0.2789
BARBOUR	0.2783
CALHOUN	0.2775
HARRISON	0.2757
WEITZEL	0.2755
HANCOCK	0.2733
TYLER	0.2732
MARION	0.2729
RITCHIE	0.2725
LEWIS	0.2715
SUMMERS	0.2706
NICHOLAS	0.2706
RANDOLPH	0.2691
GREENBRIER	0.2687
CLAY	0.2684
MASON	0.2656
WEBSTER	0.2639
DODDRIIDGE	0.2628
MERCER	0.2623
PRESTON	0.2605
WAYNE	0.2587
TUCKER	0.2585
MINGO	0.2561
PLEASANTS	0.2499
LINCOLN	0.2485
RALEIGH	0.2465
ROANE	0.2431
BOONE	0.2412
BROOKE	0.2401
MCDOWELL	0.2379
WYOMING	0.2303
FAYETTE	0.2284
LOGAN	0.2260



Source: U.S. Census Bureau, 1990

U.S. Bureau of Economic Analysis, 1990

U.S. Department of Commerce, Bureau of Economic Analysis, 1990

U.S. Department of Commerce, Bureau of Economic Analysis, 1990

U.S. Department of Commerce, Bureau of Economic Analysis, 1990

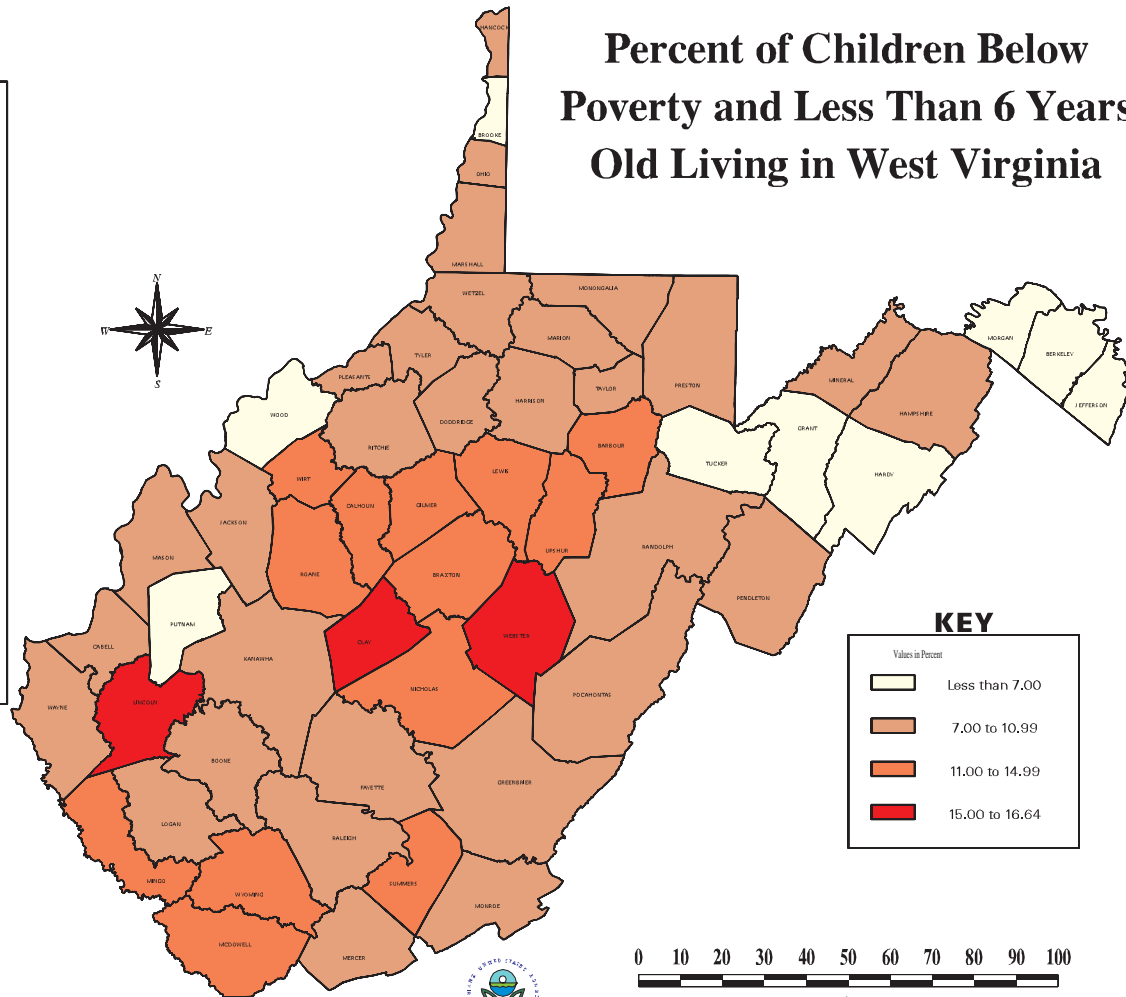
U.S. Department of Commerce, Bureau of Economic Analysis, 1990

U.S. Department of Commerce, Bureau of Economic Analysis, 1990

# Percent of Children Below Poverty and Less Than 6 Years Old Living in West Virginia

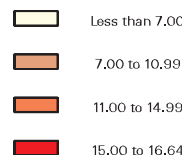
## County Percent

CLAY	0.1664
WEBSTER	0.1581
LINCOLN	0.1557
GLIMMER	0.1440
MCDOWELL	0.1397
MINGO	0.1323
BARBOUR	0.1243
LEWIS	0.1209
CALHOUN	0.1194
ROANE	0.1176
WYOMING	0.1163
UPSHUR	0.1156
NICHOLAS	0.1148
BRAXTON	0.1127
WIRT	0.1114
SUMMERS	0.1110
MERCER	0.1049
BOONE	0.1039
LOGAN	0.1038
RANDOLPH	0.1037
TAYLOR	0.1030
RALEIGH	0.1021
RTICHE	0.1013
MUNROE	0.1005
WETZEL	0.1001
MARION	0.0998
FAYETTE	0.0990
MASON	0.0977
CABELL	0.0968
POCAHONTAS	0.0956
PLEASANTS	0.0931
HARRISON	0.0913
GREENBRIER	0.0876
OHIO	0.0864
JACKSON	0.0844
KANAWHA	0.0810
PENDLETON	0.0803
WAYNE	0.0783
MINERAL	0.0778
MARSHALL	0.0772
HANDOCK	0.0755
PRESTON	0.0753
TYLER	0.0752
MUNICICALIA	0.0743
DODDRIDGE	0.0733
HAMPSHIRE	0.0716
WOOD	0.0676
TUCKER	0.0655
GRANT	0.0646
BERKELEY	0.0584
BROOKE	0.0552
JEFFERSON	0.0520
HARRY	0.0501
MORGAN	0.0462
PUTNAM	0.0454



## KEY

Values in Percent



0 10 20 30 40 50 60 70 80 90 100



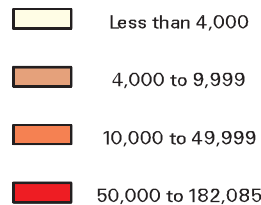
Miles



# Housing Units Estimated to Contain Lead Based Paint in Virginia

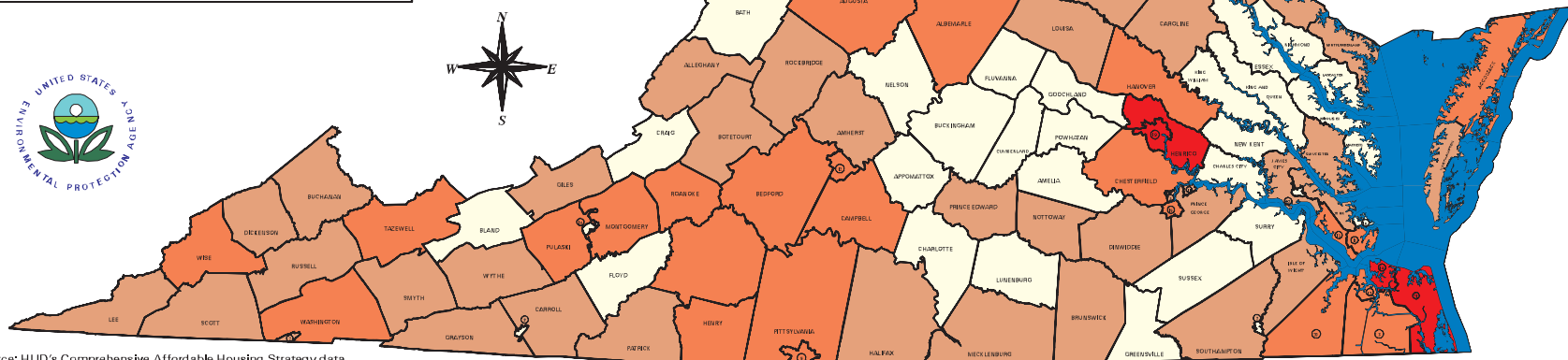
County	Number	County	Number
FAIRFAX	182,085	PATRICK	5,569
RICHMOND	74,580	ROCKBRIDGE	5,519
VIRGINIA BEACH	73,586	ORANGE	5,504
NORFOLK	72,419	ISLE OF WIGHT	5,481
ARLINGTON	64,570	DINWIDDIE	5,452
HENRICO	59,247	LOUISA	5,407
NEWPORT NEWS	45,674	PRINCE GEORGE	5,282
ALEXANDRIA	45,185	GILES	5,268
CHESTERFIELD	38,719	COLONIAL HEIGHTS	5,085
PRINCE WILLIAM	37,746	GRAYSON	5,040
HAMPTON	36,838	DICKENSON	4,879
ROANOKE	34,899	CAROLINE	4,601
PORTSMOUTH	32,205	SOUTHAMPTON	4,532
CHESAPEAKE	30,449	NORTHUMBERLAND	4,519
ROANOKE	21,650	PRINCE EDWARD	4,428
LYNCHBURG	20,267	BRUNSWICK	4,427
DANVILLE	18,545	NORTHAMPTON	4,397
MONTGOMERY	17,013	NOTTOWAY	4,241
HENRY	16,393	MANASSAS	4,241
LOUDOUN	15,692	ALLEGHANY	4,046
ALBEMARLE	15,482	NELSON	3,970
PITTSYLVANIA	15,351	FALLS CHURCH	3,901
ROCKINGHAM	14,933	LUNENBURG	3,819
AUGUSTA	14,022	LANCASTER	3,748
HANOVER	13,703	MIDDLESEX	3,743
TAZEWELL	13,535	FLOYD	3,693
SUFFOLK	13,097	CHARLOTTE	3,571
WASHINGTON	12,983	RADFORD	3,443
CHARLOTTESVILLE	12,890	APPOMATTOX	3,437
CAMPBELL	12,441	BUCKINGHAM	3,424
PETERSBURG	12,241	MATHEWS	3,223
WISE	11,066	KING GEORGE	3,194
ACCOMACK	11,016	GOOCHLAND	3,158
BEDFORD	10,725	MADISON	3,047
FRANKLIN	10,725	SUSSEX	3,027
PULASKI	10,555	CLARKE	2,994
FREDERICK	10,030	FLUVANNA	2,892
STAFFORD	9,880	POWHTAN	2,885
MECKLENBURG	9,626	ESSEX	2,848
SMYTH	9,396	KING WILLIAM	2,566
SHENANDOAH	9,337	COVINGTON	2,559
FAUQUIER	9,278	GREENE	2,493
YORK	9,140	GREENSVILLE	2,459
BUCHANAN	8,616	WILLIAMSBURG	2,393
SPOTSYLVANIA	8,605	POQUOSON	2,377
HALIFAX	8,515	FRANKLIN	2,326
CARROLL	8,478	RICHMOND	2,256
RUSSELL	8,147	NEW KENT	2,190
STAUNTON	7,534	SOUTH BOSTON	2,170
AMHERST	7,374	CUMBERLAND	2,162
HOPEWELL	7,338	AMELIA	2,115
WYTHE	7,320	GALAX	2,077
WARREN	7,189	RAPPAHANNOCK	1,968
SCOTT	7,183	SURRY	1,937
SALEM	7,085	BUENA VISTA	1,916
LEE	6,938	BEDFORD	1,909
WINCHESTER	6,938	KING AND QUEEN	1,904
BOTETOURT	6,571	BLAND	1,862
FAIRFAX	6,305	LEXINGTON	1,816
BRISTOL	6,274	BATH	1,799
HARRISONBURG	6,216	MANASSAS PARK	1,736
CULPEPER	6,197	EMPORIA	1,642
GLOUCESTER	6,186	CHARLES CITY	1,622
PAGE	6,126	CLIFTON FORGE	1,543
FREDERICKSBURG	6,073	CRAIG	1,303
JAMES CITY	5,996	NORTON	1,230
WAYNESBORO	5,902	HIGHLAND	1,144
WESTMORELAND	5,731		
MARTINSBURG	5,729	Total	1,607,189

## KEY



## INCORPORATED CITIES

- ALEXANDRIA
- BRISTOL
- CHESAPEAKE
- COLONIAL HEIGHTS
- DANVILLE
- FALLS CHURCH
- FRANKLIN
- FREDERICKSBURG
- GALAX
- HAMPTON
- HOPEWELL
- LYNCHBURG
- NEWPORT NEWS
- NORFOLK
- PETERSBURG
- POQUOSON
- PORTSMOUTH
- RADFORD
- RICHMOND
- SUFFOLK
- VIRGINIA BEACH
- WILLIAMSBURG



0 10 20 30 40 50 60 70 80 90 100



Miles

Source: HUD's Comprehensive Affordable Housing Strategy data.  
Portions of CHAS data were created from U.S. Census data.  
CHAS data does not contain seasonal and college dormitory units.

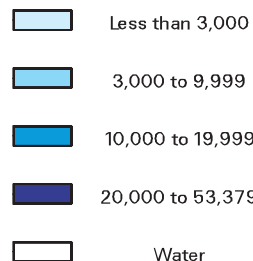
Estimated % of housing units with LBP =  $\frac{(\# \text{ of housing units before } 1940 \times .88 + \text{housing units } 1940-60 \times .92 + \text{housing units } 1961-80 \times .76)}{\text{total housing units}}$

Projection: Albers Equal Area

# Number of Housing Units Containing Lead Based Paint that are Affordable in Virginia

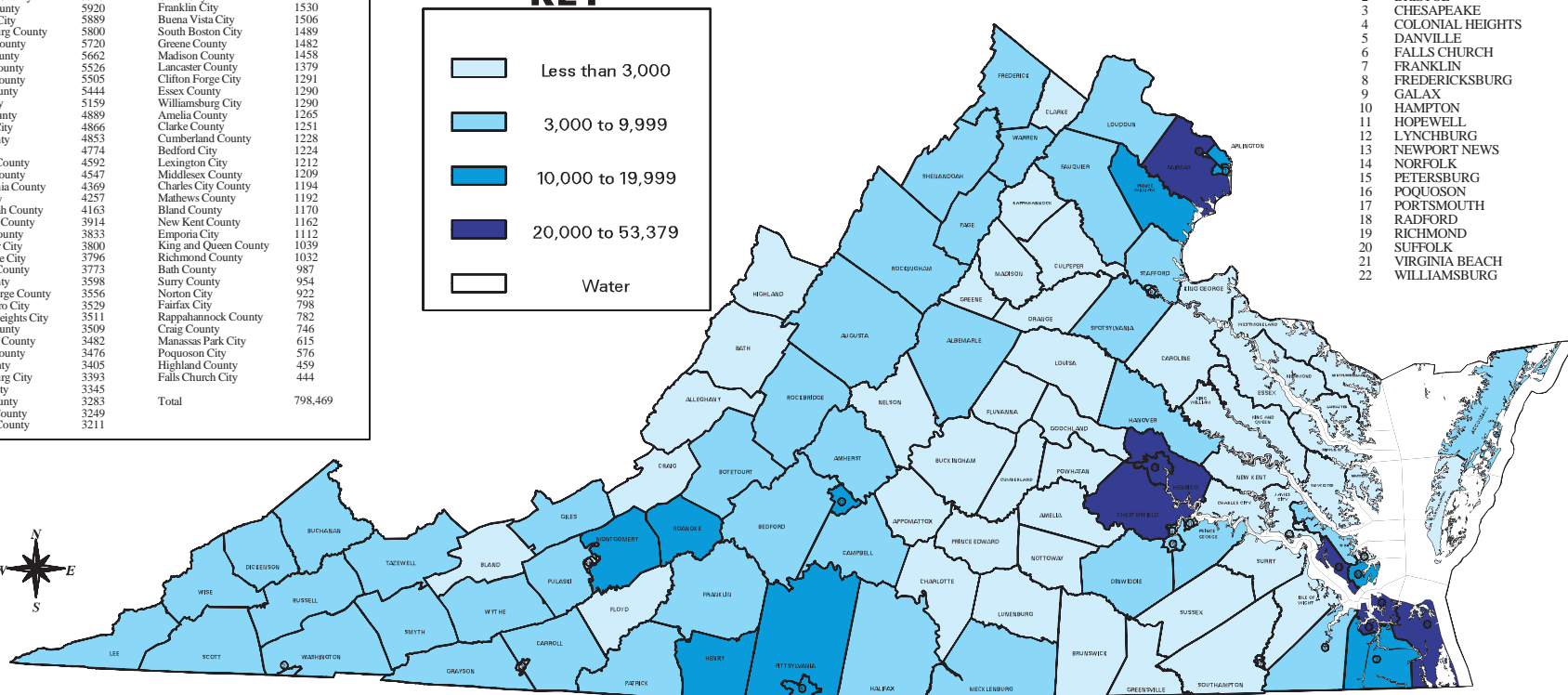
County	Number	County	Number
Richmond City	53379	Rockbridge County	3188
Norfolk City	44332	Fredericksburg City	3016
Henrico County	35847	Orange County	2975
Roanoke City	27081	Brunswick County	2974
Virginia Beach City	25151	Nottoway County	2972
Fairfax County	25111	Culpeper County	2932
Newport News City	24736	Isle of Wight County	2882
Portsmouth City	21041	Southampton County	2780
Chesterfield County	20275	Louisa County	2740
Hampton City	19657	Prince Edward County	2703
Arlington County	18148	Lunenburg County	2676
Danville City	14023	Alleghany County	2658
Chesapeake City	13733	Northampton County	2649
Lynchburg City	13526	Caroline County	2558
Alexandria City	12915	Gloucester County	2510
Roanoke County	11424	James City County	2314
Montgomery County	10617	Charlotte County	2263
Henry County	10489	Radford City	2232
Prince William County	10422	Westmoreland County	2167
Pittsylvania County	10223	Covington City	2126
Petersburg City	9716	Nelson County	2120
Tazewell County	9121	Floyd County	2067
Charlottesville City	8347	Buckingham County	2031
Rockingham County	8018	Appomattox County	2012
Albemarle County	7784	Sussex County	1963
Augusta County	7782	Greensville County	1747
Wise County	7758	Flavanna County	1729
Washington County	7717	Goodland County	1708
Suffolk City	7648	King George County	1651
Campbell County	7281	King William County	1644
Pulaski County	6915	Manassas City	1637
Smyth County	6738	Powhatan County	1620
Accomack County	6310	Northumberland County	1554
Buchanan County	5973	Galax City	1547
Halifax County	5920	Franklin City	1530
Hopewell City	5889	Buena Vista City	1506
Mecklenburg County	5800	South Boston City	1489
Hanover County	5720	Greene County	1482
Russell County	5662	Madison County	1458
Bedford County	5526	Lancaster County	1379
Franklin County	5505	Clifton Forge City	1291
Carroll County	5444	Essex County	1290
Lee County	5159	Williamsburg City	1290
Wythe County	4889	Amelia County	1265
Stanton County	4866	Clarke County	1251
Scott County	4853	Cumberland County	1228
Salem City	4774	Bedford City	1224
Frederick County	4592	Lexington City	1212
Amherst County	4547	Middlesex County	1209
Spotsylvania County	4369	Charles City County	1194
Bristol City	4257	Mathews County	1192
Shenandoah County	4163	Bland County	1170
Dinwiddie County	3914	New Kent County	1162
Stafford County	3833	Emporia City	1112
Winchester City	3800	King and Queen County	1039
Martinsville City	3796	Richmond County	1032
Botetourt County	3773	Bath County	987
Giles County	3598	Surry County	954
Prince George County	3556	Norton City	922
Waynesboro City	3529	Fairfax City	798
Colonial Heights City	3511	Rappahannock County	782
Warren County	3509	Craig County	746
Dickenson County	3482	Manassas Park City	615
Groveson County	3476	Poquoson City	576
York County	3405	Highland County	459
Harrisonburg City	3393	Falls Church City	444
Page County	3345		
Patrick County	3283		
Fauquier County	3249		
Loudoun County	3211		
		Total	798,469

## KEY



## INCORPORATED CITIES

- ALEXANDRIA
- BRISTOL
- CHESAPEAKE
- COLONIAL HEIGHTS
- DANVILLE
- FALLS CHURCH
- FRANKLIN
- FREDERICKSBURG
- GALAX
- HAMPTON
- HOPEWELL
- LYNCHBURG
- NEWPORT NEWS
- NORFOLK
- PETERSBURG
- POQUOSON
- PORTSMOUTH
- RADFORD
- RICHMOND
- SUFFOLK
- VIRGINIA BEACH
- WILLIAMSBURG



Source: HUD's Comprehensive Affordable Housing Strategy data.  
Portions of CHAS data were created from U.S. Census data.  
CHAS data does not contain seasonal and college dormitory units.

Estimated % of housing units with LBP =  $(\# \text{ of housing units before } 1940 \times .88 + \text{housing } 1940\text{-}60 \times .92 + \text{housing units } 1961\text{-}80 \times .76) / \text{total housing units}$ .

Estimated number of affordable housing units with LBP =  $\# \text{ affordable housing units} \times \% \text{ of housing units with LBP}$ .  
Estimated affordable housing units = sum of renter and owner occupied units for which household income was less than \$ 35,000 and housing costs accounted for less than 30% of household incomes.

Projection: Albers Equal Area

0 10 20 30 40 50 60 70 80 90 100



Miles





County	Percent	County	Percent
ARLINGTON	0.4004	AUGUSTA	0.3106
ALEXANDRIA	0.3930	KING WILLIAM	0.3097
NORFOLK	0.3911	CRAIG	0.3089
NEWPORT NEWS	0.3753	HENRY	0.3088
LOUPOUN	0.3694	GLOUCESTER	0.3077
RICHMOND	0.3658	AMELIA	0.3072
VIRGINIA BEACH	0.3632	CAMPBELL	0.3056
PETERSBURG	0.3622	FLOYD	0.3055
WARREN	0.3605	POWHATAN	0.3052
PORTSMOUTH	0.3597	AMHERST	0.3040
FREDERICKSBURG	0.3577	CUMBERLAND	0.3029
GREENE	0.3552	LANCASTER	0.3028
GALAX	0.3537	DINWIDDIE	0.3023
PRINCE WILLIAM	0.3537	CLARKE	0.3021
KING AND QUEEN	0.3522	NELSON	0.3017
HAMPTON	0.3504	PAGE	0.3013
BUCKINGHAM	0.3471	CHARLOTTE	0.3007
KING GEORGE	0.3448	CARROLL	0.3002
FAUQUIER	0.3445	SURRY	0.3002
MIDDLESEX	0.3422	MONTGOMERY	0.2998
HENRICO	0.3387	GREENSVILLE	0.2995
CULPEPER	0.3386	LOUISA	0.2986
HOPEWELL	0.3371	ORANGE	0.2966
SPOTSVYLVANIA	0.3365	ESSEX	0.2964
WESTMORELAND	0.3362	COLONIAL HEIGHTS	0.2940
CAROLINE	0.3353	PULASKI	0.2939
JAMES CITY	0.3345	HIGHLAND	0.2938
CHESAPEAKE	0.3294	APPOMATTOX	0.2922
LYNCHBURG	0.3287	FRANKLIN	0.2913
ALBEMARLE	0.3286	PITTSYLVANIA	0.2908
PRINCE GEORGE	0.3282	LUNESBURG	0.2898
FAIRFAX	0.3275	GRAYSON	0.2885
FLUVANNA	0.3266	GILES	0.2877
FREDERICK	0.3255	MATHEWS	0.2860
FALLS CHURCH	0.3250	SMYTH	0.2856
SUFFOLK	0.3249	ROANOKE	0.2851
GOOCHLAND	0.3240	SOUTHAMPTON	0.2845
NEW KENT	0.3238	HALIFAX	0.2841
SUSSEX	0.3237	WYTHE	0.2824
FRANKLIN	0.3232	MECKLENBURG	0.2819
ROCKINGHAM	0.3227	BRUNSWICK	0.2786
ROCKBRIDGE	0.3226	YORK	0.2779
BLAND	0.3211	WASHINGTON	0.2761
DANVILLE	0.3197	BOTETOURT	0.2751
RICHMOND	0.3195	BATH	0.2745
BRISTOL	0.3192	LEE	0.2707
ISLE OF WIGHT	0.3186	ALLEGHANY	0.2692
STAFFORD	0.3181	SCOTT	0.2649
MADISON	0.3175	POQUOSON	0.2646
NORTHAMPTON	0.3170	RUSSELL	0.2629
NORTHUMBERLAND	0.3165	PATRICK	0.2629
CHESTERFIELD	0.3152	DICKENSON	0.2586
RAPPAHANNOCK	0.3142	TAZEWELL	0.2586
ACCOMACK	0.3139	WISE	0.2560
NORTHAMPTON	0.3136	CHARLES CITY	0.2431
BEDFORD	0.3119	PRINCE EDWARD	0.2427
HANOVER	0.3119	BUCHANAN	0.2401
SHENANDOAH	0.3114	RADFORD	0.2173
		WILLIAMSBURG	0.1522

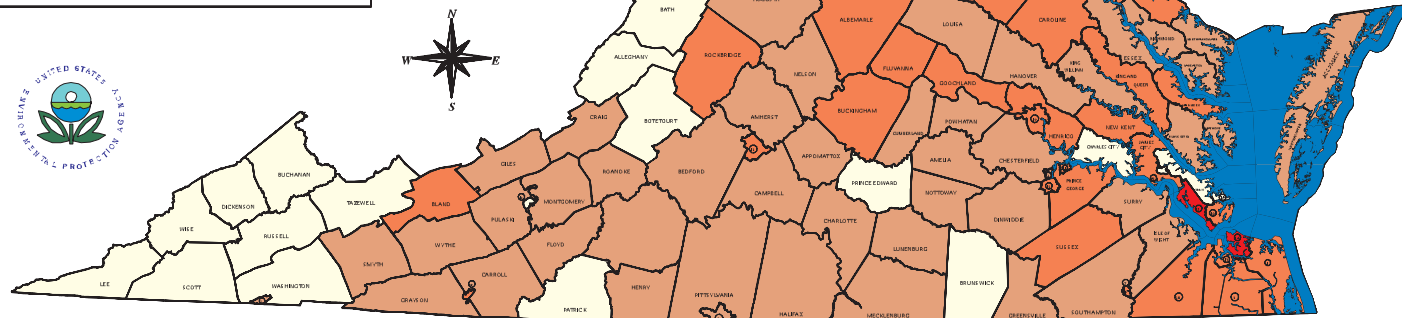
# Percent of Children Less Than 6 Years Old Living in Virginia

## KEY



## INCORPORATED CITIES

- ALEXANDRIA
- BRISTOL
- CHESAPEAKE
- COLONIAL HEIGHTS
- DANVILLE
- FALLS CHURCH
- FRANKLIN
- FREDERICKSBURG
- GALAX
- HAMPTON
- HOPEWELL
- LYNCHBURG
- NEWPORT NEWS
- NORFOLK
- PETERSBURG
- POQUOSON
- PORTSMOUTH
- RADFORD
- RICHMOND
- SUFFOLK
- VIRGINIA BEACH
- WILLIAMSBURG



0 10 20 30 40 50 60 70 80 90 100



Miles

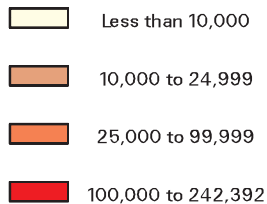




# Housing Units Estimated to Contain Lead Based Paint in Maryland

County	Number
BALTIMORE	242,392
DISTRICT OF COLUMBIA	222,650
BALTIMORE	206,144
PRINCE GEORGES	199,761
MONTGOMERY	186,661
ANNE ARUNDEL	104,921
HARFORD	40,363
HOWARD	34,594
WASHINGTON	33,326
FREDERICK	31,893
CARROLL	25,561
ALLEGANY	25,268
WORCESTER	21,167
WICOMICO	19,606
CHARLES	18,968
CECIL	17,114
ST MARYS	15,952
DORCHESTER	10,115
CALVERT	10,052
GARRETT	9,460
TALBOT	9,098
QUEEN ANNES	7,971
CAROLINE	7,203
SOMERSET	6,348
KENT	5,775
Total	1,512,363

## KEY



0 10 20 30 40 50 60 70 80



Miles



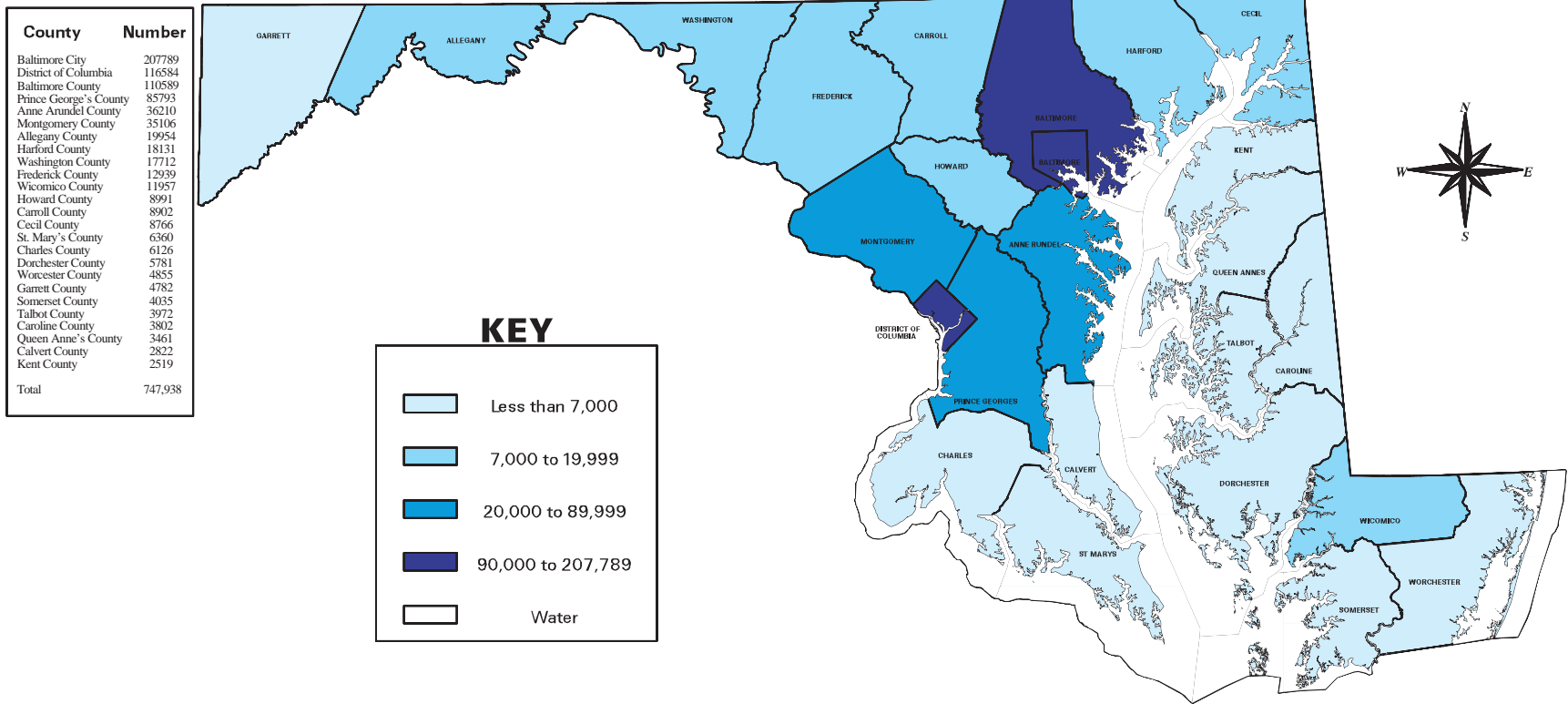
Source: HUD's Comprehensive Affordable Housing Strategy data.  
Portions of CHAS data were created from U.S. Census data.  
CHAS data does not contain seasonal and college dormitory units.

Estimated % of housing units with LBP =  $(\# \text{ of housing units before } 1940 * .88 + \text{housing } 1940-60 * .92 + \text{housing units } 1961-80 * .76) / \text{total housing units}.$

Projection: Albers Equal Area



# Number of Housing Units Containing Lead Based Paint that are Affordable in Maryland



Source: HUD's Comprehensive Affordable Housing Strategy data.  
Portions of CHAS data were created from U.S. Census data.  
CHAS data does not contain seasonal and college dormitory units.





Estimated % of housing units with LBP =  $(\# \text{ of housing units before } 1940 * .88 + \text{housing } 1940\text{-}60 * .92 + \text{housing units } 1961\text{-}80 * .76) / \text{total housing units}$ .

Estimated number of affordable housing units with LBP =  $\# \text{ affordable housing units} * \% \text{ of housing units with LBP}$ .  
Estimated affordable housing units = sum of renter and owner occupied units for which household income was less than \$ 35,000 and housing costs accounted for less than 30% of household incomes.  
Projection: Albers Equal Area



County	Percent
--------	---------

## KEY

	Less than 30.00
	30.00 to 32.99
	33.00 to 34.99
	35.00 to 36.66

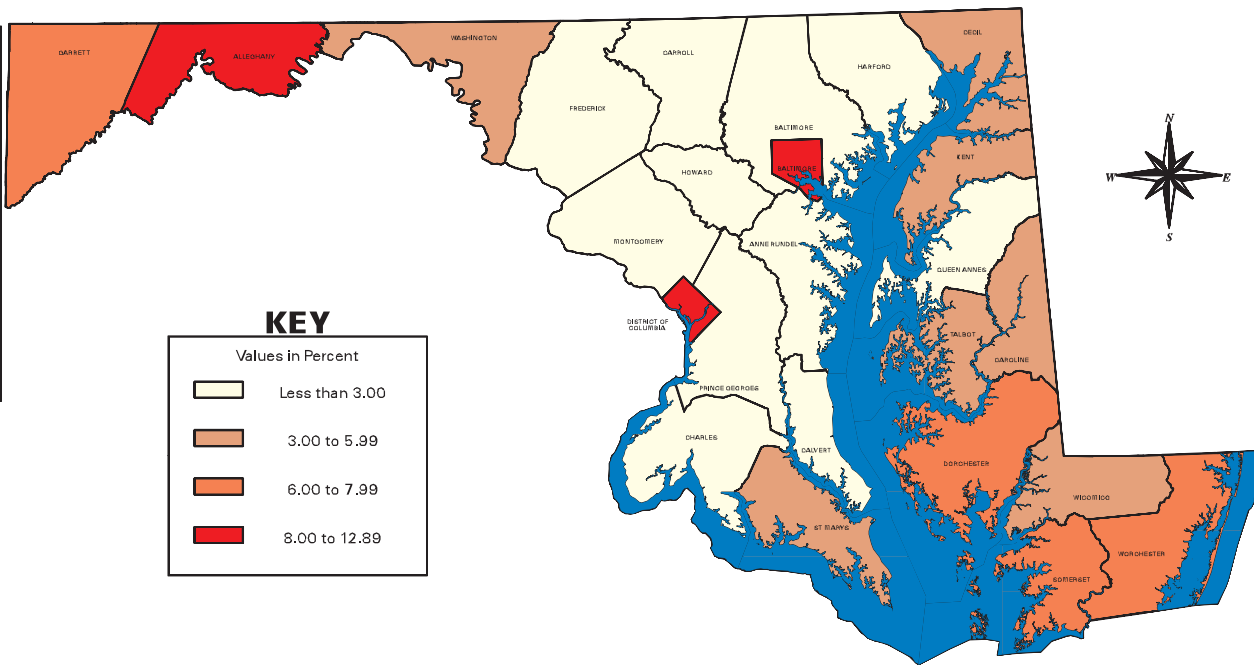
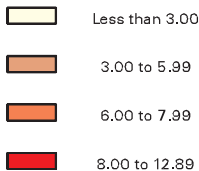


# Percent of Children Below Poverty and Less Than 6 Years Old Living in Maryland

County	Percent
BALTIMORE	0.1289
DISTRICT OF COLUMBIA	0.0998
ALLEGANY	0.0948
DORCHESTER	0.0764
GARRETT	0.0681
SOMERSET	0.0660
WORCESTER	0.0604
WICOMICO	0.0595
KENT	0.0568
CAROLINE	0.0542
WASHINGTON	0.0535
ST MARYS	0.0392
CECIL	0.0378
TALBOT	0.0318
HARFORD	0.0280
BALTIMORE	0.0278
PRINCE GEORGES	0.0275
QUEEN ANNES	0.0267
CALVERT	0.0238
FREDERICK	0.0235
ANNE ARUNDEL	0.0213
CHARLES	0.0205
MONTGOMERY	0.0190
CARROLL	0.0177
HOWARD	0.0145

## KEY

Values in Percent



0 10 20 30 40 50 60 70 80



Miles



Source: USDA/Census Bureau, Statistical

Mapping Branch (2000)

1990 Census of the United States, Census

Department of Agriculture, U.S. Department of

Agriculture, National Service

Mapping Branch (2000)

Mapping Branch (2000)

Mapping Branch (2000)

Mapping Branch (2000)

Mapping Branch (2000)

Mapping Branch (2000)

Mapping Branch (2000)

Mapping Branch (2000)

Mapping Branch (2000)

Mapping Branch (2000)

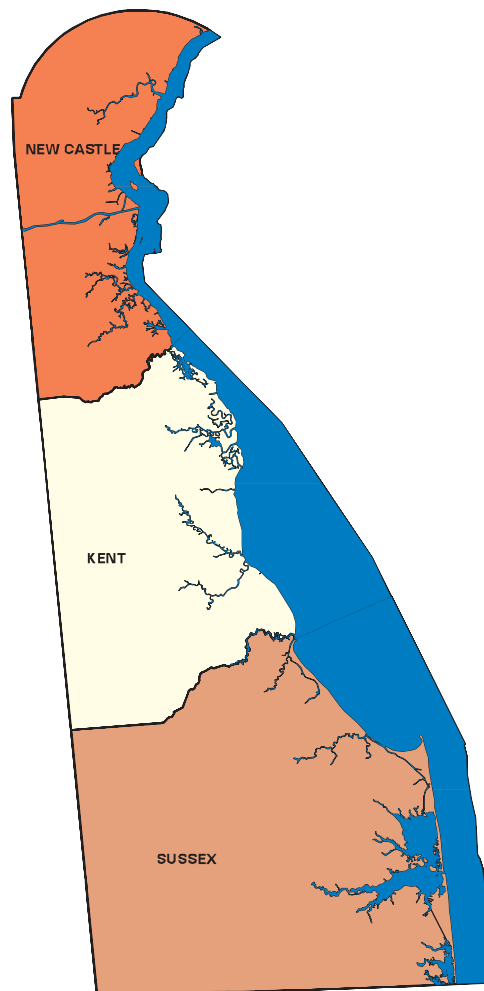
Mapping Branch (2000)

Mapping Branch (2000)

Mapping Branch (2000)

# Housing Units Estimated to Contain Lead Based Paint in Delaware

County	Number
NEW CASTLE	122,328
SUSSEX	40,661
KENT	27,954
Total	190,943



## KEY

	27,954
	40,661
	122,328

Source: HUD's Comprehensive Affordable Housing Strategy data.  
Portions of CHAS data were created from U.S. Census data.  
CHAS data does not contain seasonal and college dormitory units.

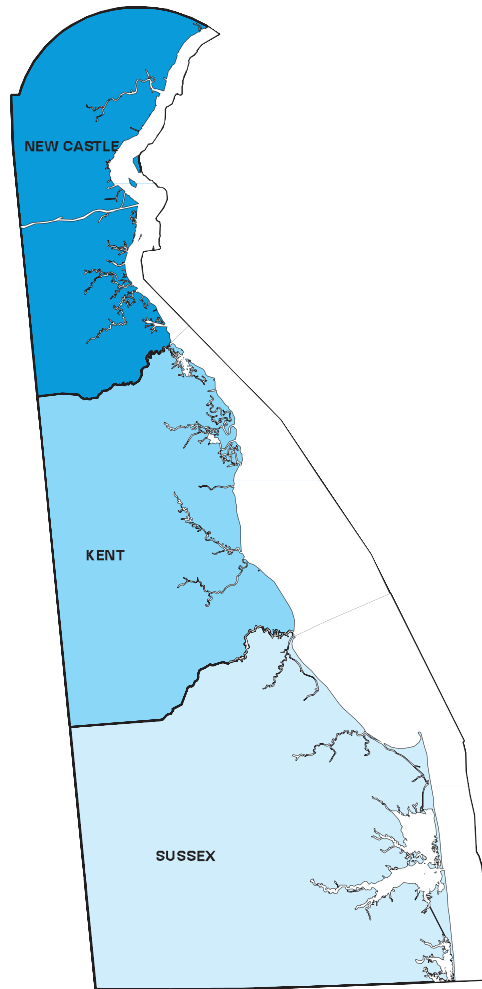
Estimated % of housing units with LBP = (# of housing units before 1940 \* .88 + housing 1940-60 \* .92 + housing units 1961-80 \* .76) / total housing units.

Projection: Albers Equal Area



# Number of Housing Units Containing Lead Based Paint that are Affordable in Delaware

County	Number
New Castle County	59780
Kent County	15625
Sussex County	14412
Total	89,817



## KEY

	14,412
	15,625
	59,780
	Water



Source: HUD's Comprehensive Affordable Housing Strategy data.  
Portions of CHAS data were created from U.S. Census data.  
CHAS data does not contain seasonal and college dormitory units.

Estimated % of housing units with LBP = (# of housing units before 1940 \* .88 + housing 1940-60 \* .92 + housing units 1961-80 \* .76) / total housing units.

Estimated number of affordable housing units with LBP = # affordable housing units \* % of housing units with LBP.  
Estimated affordable housing units = sum of renter and owner occupied units for which household income was less than \$ 35,000 and housing costs accounted for less than 30% of household incomes.  
Projection: Albers Equal Area



# Percent of Children Less Than 6 Years Old Living in Delaware

County	Percent
KENT	0.3420
NEW CASTLE	0.3350
SUSSEX	0.3301

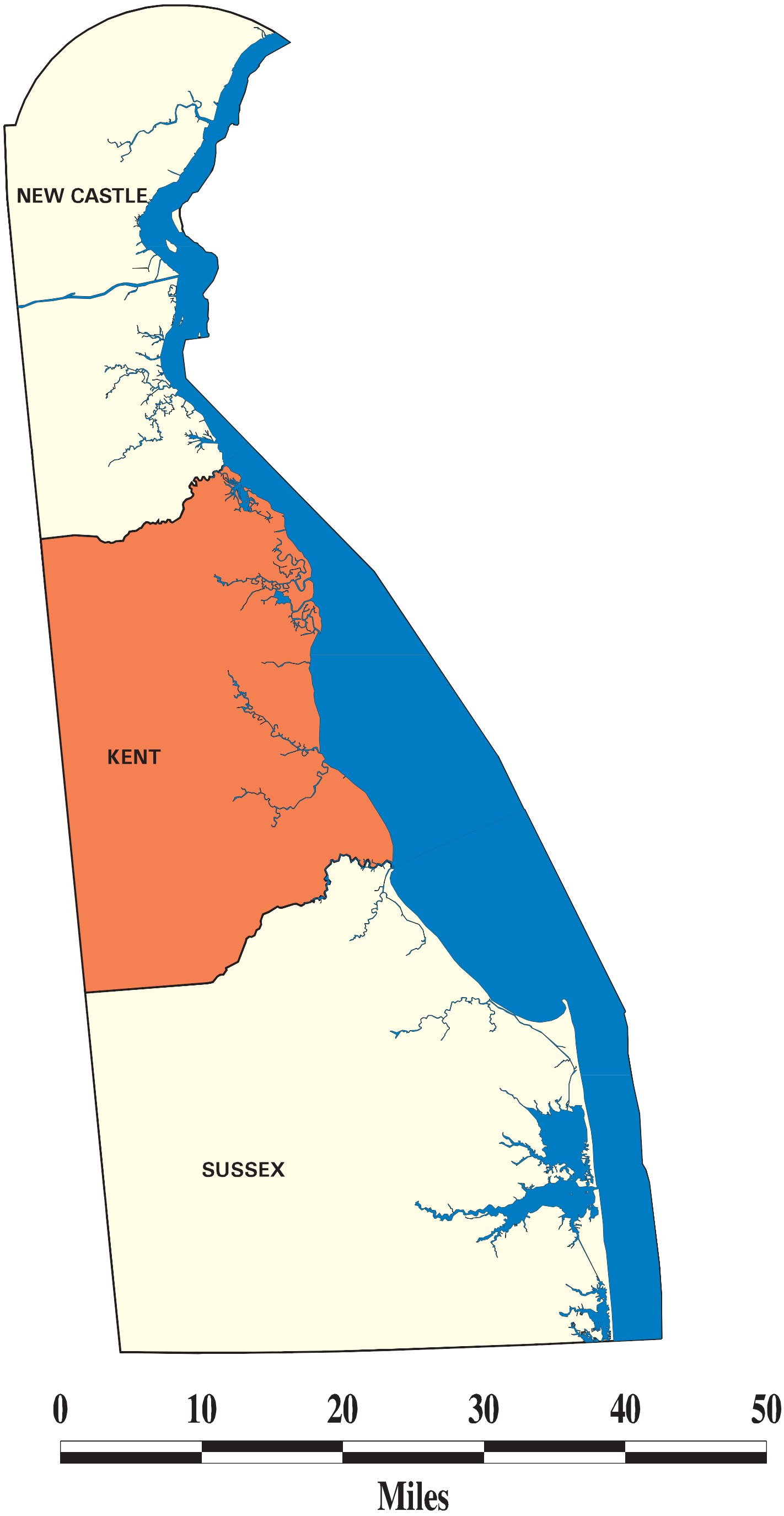
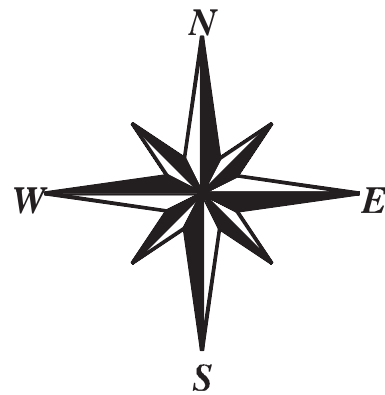
KEY

Values in Percent

33.01

33.50

34.20



Source: HUD's Comprehensive Affordable Housing Strategy (CHAS)

1990 Bureau of Census with Economic Data  
Summary of tape file 3A for the Percentage of  
Children under Age 6 and below poverty.  
Summary tape file 1A for Number of Children  
under age 6.

Projection: Albers Equal Area








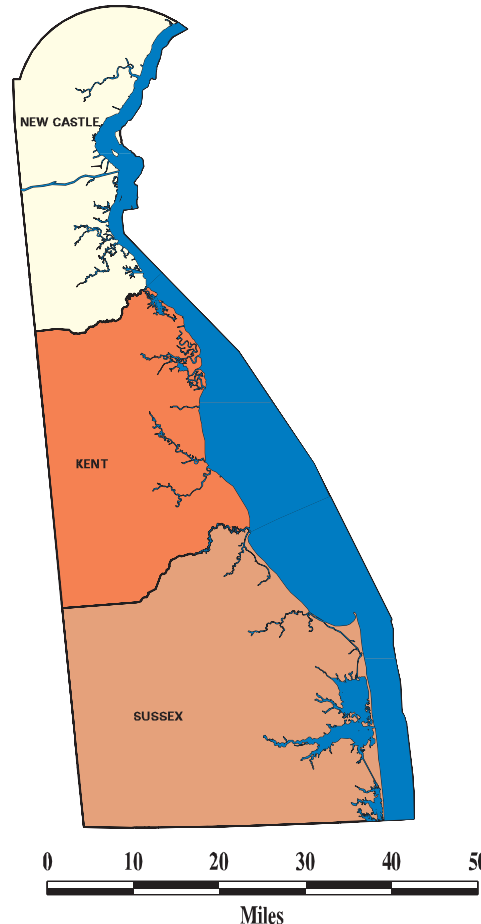
# Percent of Children Below Poverty and Less Than 6 Years Old Living in Delaware

County	Percent
KENT	0.0679
SUSSEX	0.0601
NEW CASTLE	0.0379

## KEY

Values in Percent

	3.79
	6.01
	6.79



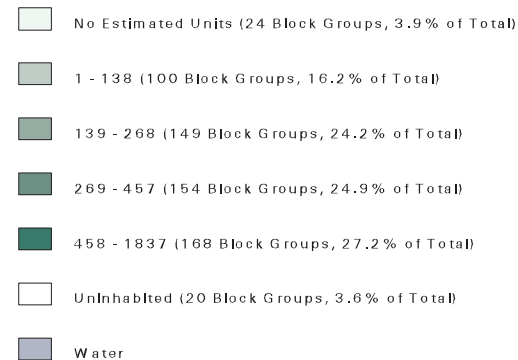
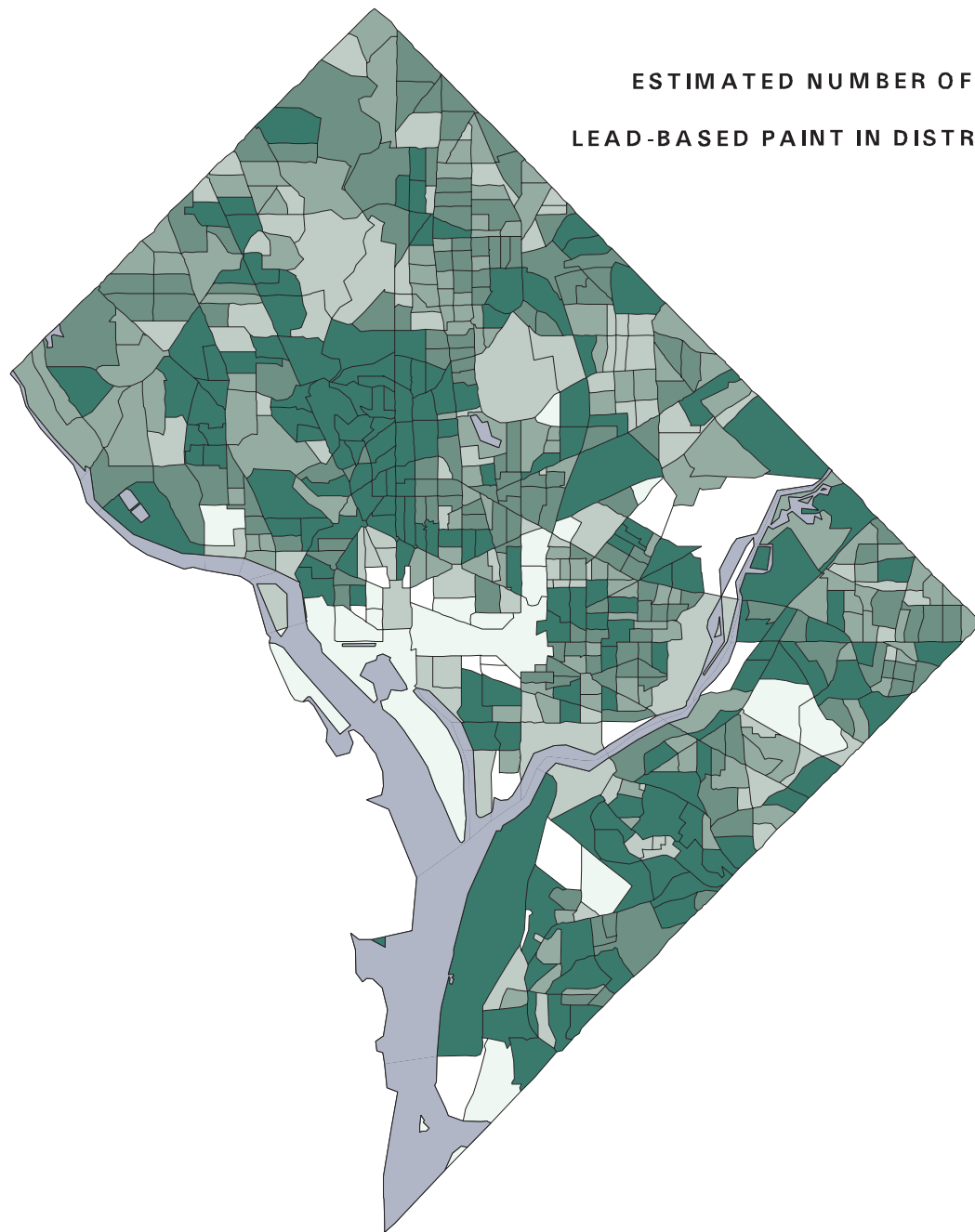
Source: DEDC Comprehensive Estimates  
Mapping Strategy (2005)

With thanks to the Delaware Department of  
Education for providing the data for the Percentages of  
Children under 6 years old living in poverty.  
Data was provided by the Delaware Department of  
Education.

Prepared by: John S. Gagliardi



# ESTIMATED NUMBER OF HOUSING UNITS CONTAINING LEAD-BASED PAINT IN DISTRICT OF COLUMBIA BLOCK GROUPS



## Data Sources:

1990 U.S. Bureau of the Census Demographic Data:  
Summary Tape File 3A (Sample Data) for Number of  
of Housing Units by Year Built

U.S. Environmental Protection Agency Data:  
"Report on the National Survey of Lead-Based Paint in Housing",  
Base Report, 1995, for estimated housing units with lead-based  
paint by year built.

## Estimated Units with Lead Based Paint Calculation:

Percent Estimated Housing Units with Lead Based Paint =  

$$\left[ \left( \text{Housing units built before 1940} \times .88 \right) + \left( \text{Housing units built between 1940 and 1960} \times .92 \right) + \left( \text{Housing units built between 1961 and 1980} \times .76 \right) \right] / \text{Total Housing Units}$$

Prepared under EPA Contract Number 68-D-1-0073, Work Assignment No. 4-10  
for the Office of Pollution Prevention and Toxics. This map has not been  
subject to Agency review. It is currently being circulated for comments  
of a technical nature.

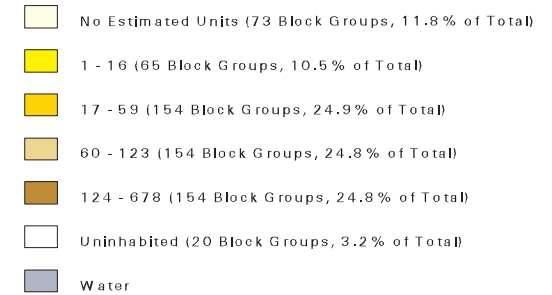
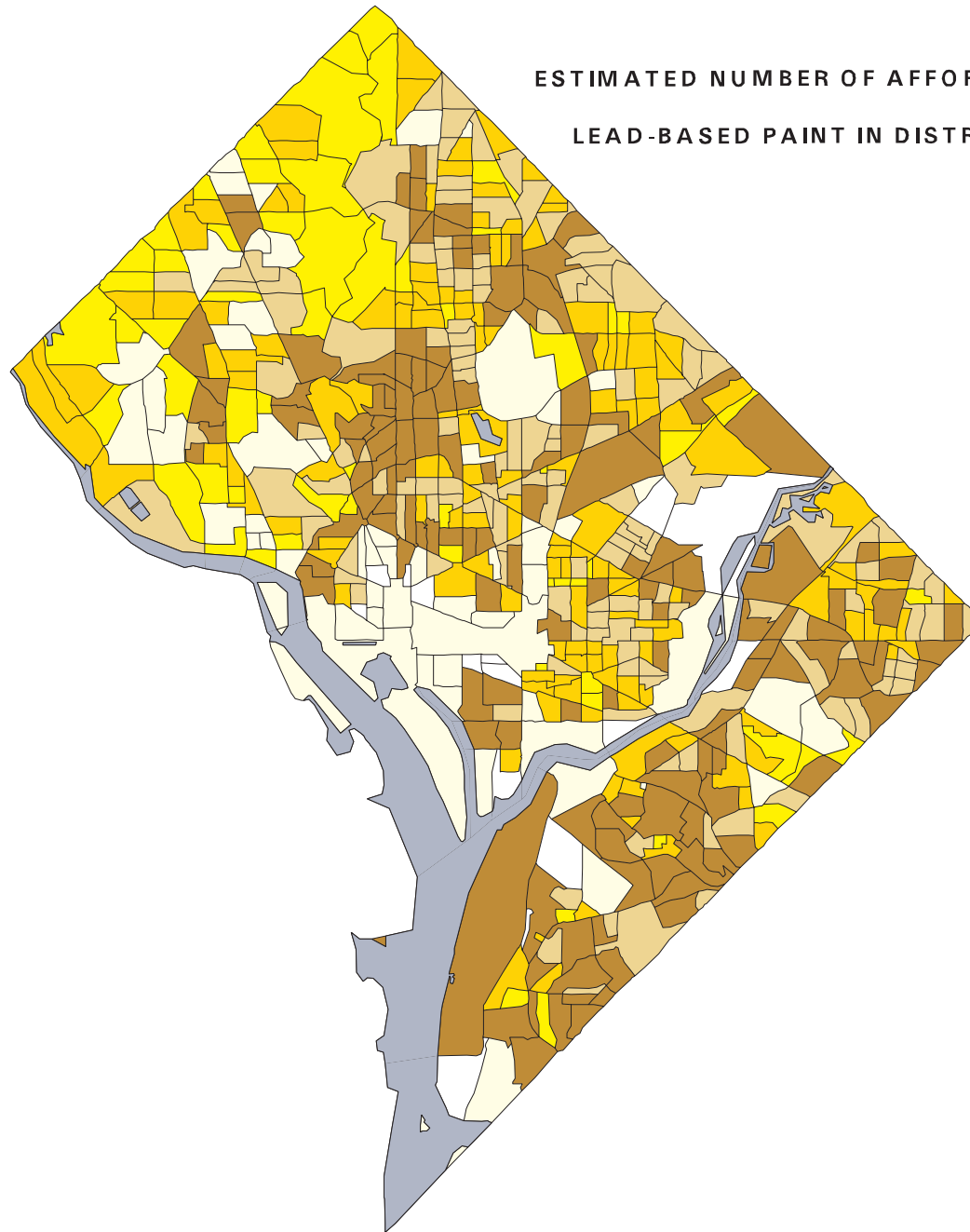
Contact: Loren Hall, OPPT (202)260-3931

Date: September 06, 1996

Projection: Albers Equal Area



# ESTIMATED NUMBER OF AFFORDABLE HOUSING UNITS CONTAINING LEAD-BASED PAINT IN DISTRICT OF COLUMBIA BLOCK GROUPS



## Data Sources:

1990 U.S. Bureau of the Census Demographic Data:  
Summary Tape File 3A (Sample Data) for Number of  
of Housing Units by Year Built, for Household Income by  
Housing Costs as a Percentage of Household Income, and for  
Total Number of Housing Units.

U.S. Environmental Protection Agency Data:  
"Report on the National Survey of Lead-Based Paint in Housing",  
Base Report, 1995, for estimated housing units with lead-based  
paint by year built.

## Estimated Affordable Housing Units with Lead Based Paint Calculation:

Estimated Percentage of Housing Units with Lead Based Paint =  

$$\left[ \frac{((\text{Housing units built before 1940} \times .88) + (\text{Housing units built between 1940 and 1980} \times .92) + (\text{Housing units built between 1981 and 1990} \times .76))}{\text{Total Housing Units}} \right]$$

Estimated Affordable Housing Units =  

$$[(\text{Sum of renter and owner occupied units for which household income was less than } \$35,000 \text{ and housing costs accounted for less than } 30\% \text{ of household income})]$$

Estimated Number of Affordable Housing Units with Lead-Based Paint =  

$$[(\text{Number of Affordable Housing Units} \times \text{Percentage of Housing Units with Lead-Based Paint})]$$

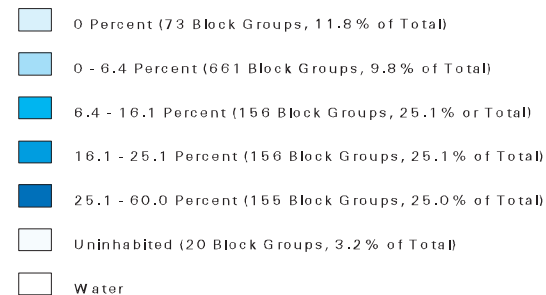
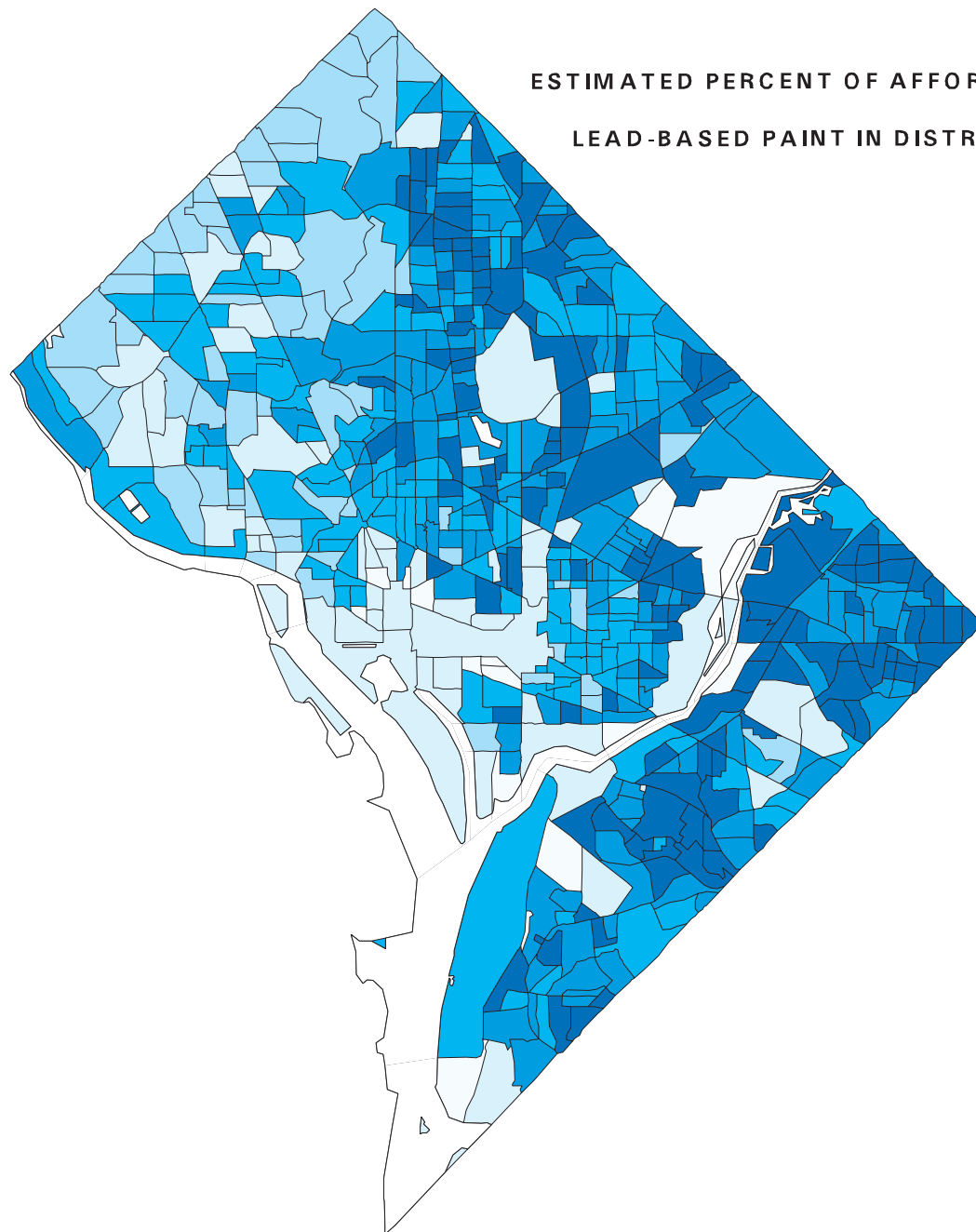
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for the Office of Pollution Prevention and Toxics. This map has not been  
subject to Agency review. It is currently being circulated for comments  
of a technical nature.

Contact: Loren Hall, OPPT (202)260-3931

Date: September 3, 1996  
Projection: Albers Equal Area



# ESTIMATED PERCENT OF AFFORDABLE HOUSING UNITS CONTAINING LEAD-BASED PAINT IN DISTRICT OF COLUMBIA BLOCK GROUPS



Data Sources:

1990 U.S. Bureau of the Census Demographic Data:  
Summary Tape File 3A (Sample Data) for Number of  
of Housing Units by Year Built, for Household Income by  
Housing Costs as a Percentage of Household Income, and for  
Total Number of Housing Units.

U.S. Environmental Protection Agency Data:  
"Report on the National Survey of Lead-Based Paint in Housing",  
Base Report, 1995, for estimated housing units with lead-based  
paint by year built.

Estimated Affordable Housing Units with Lead Based Paint Calculation:

Estimated Percentage of Housing Units with Lead Based Paint =  

$$\left[ \left( \frac{\text{Housing units built before 1940} \times .88 \right) + \left( \frac{\text{Housing units built between 1940 and 1980} \times .92 \right) + \left( \frac{\text{Housing units built between 1981 and 1990} \times .76 \right) \right] / \text{Total Housing Units}$$

Estimated Affordable Housing Units =  

$$\left[ \left( \text{Sum of renter and owner occupied units for which household income was less than \$35,000 and housing costs accounted for less than 30% of household income} \right) \right]$$

Estimated Number of Affordable Housing Units with Lead-Based Paint =  

$$\left[ \left( \text{Number of Affordable Housing Units} \times \text{Percentage of Housing Units with Lead-Based Paint} \right) \right]$$

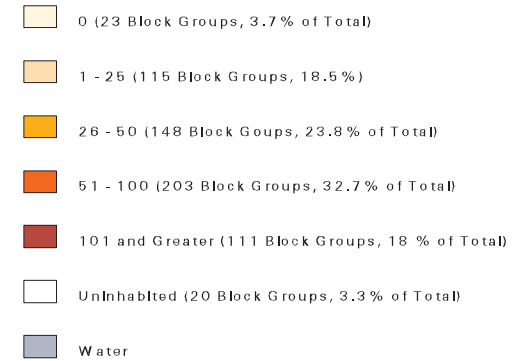
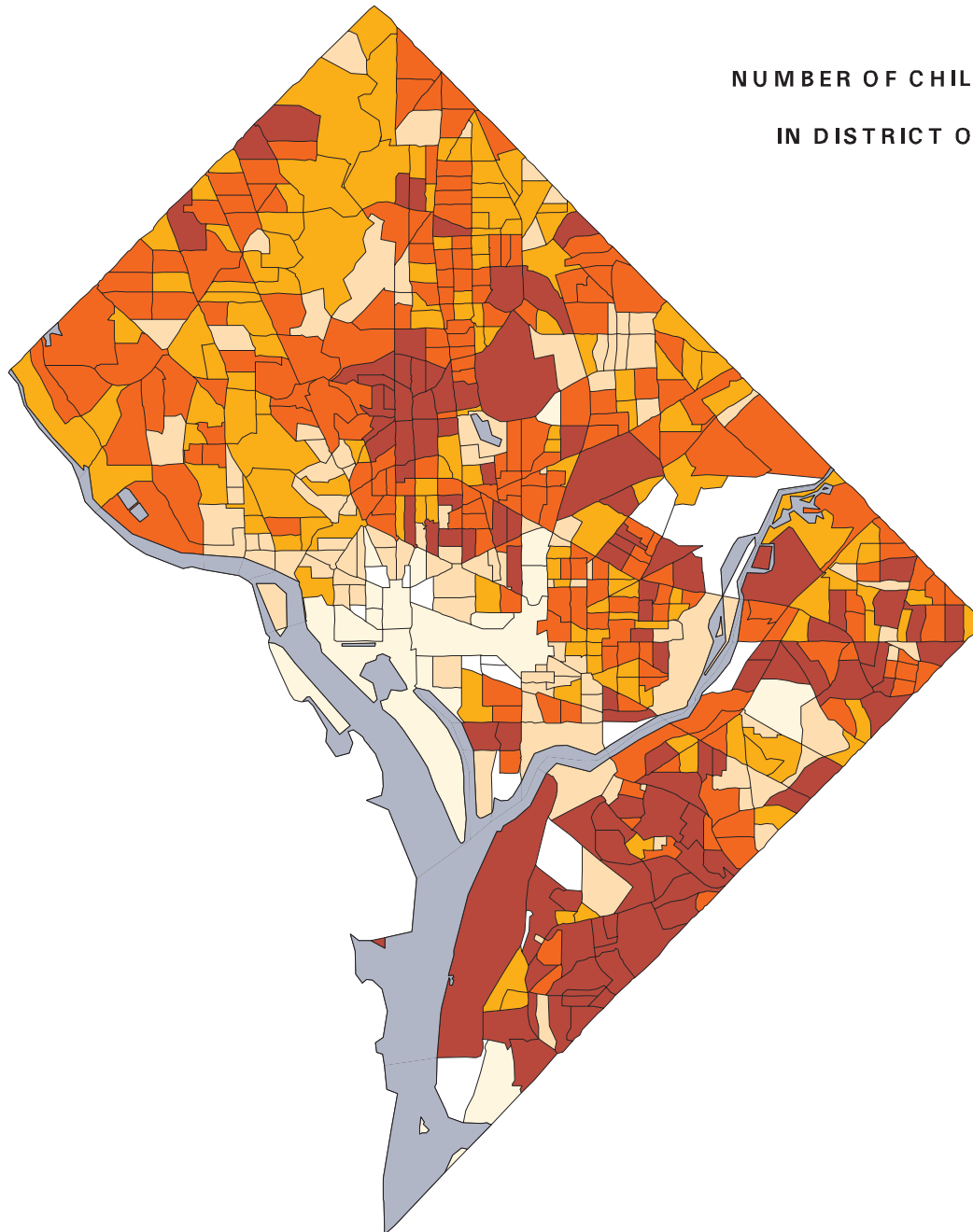
Prepared under EPA Contract Number 68-D1-0073, Work Assignment No. 4-10  
for the Office of Pollution Prevention and Toxics. This map has not been  
subject to Agency review. It is currently being circulated for comments  
of a technical nature.

Contact: Loren Hall, OPPT (202)260-3931

Date: September 3, 1996  
Projection: Albers Equal Area



# NUMBER OF CHILDREN UNDER SIX YEARS OF AGE IN DISTRICT OF COLUMBIA BLOCK GROUPS



Data Source: 1990 U.S. Bureau of Census Demographic Data:  
Summary Tape Files 1A (100% Count Data)  
for Number of Children Less Than Six Years of Age

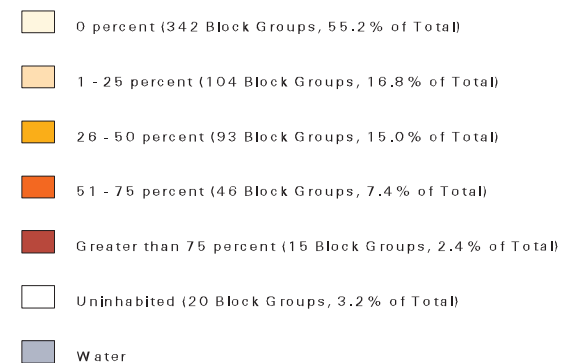
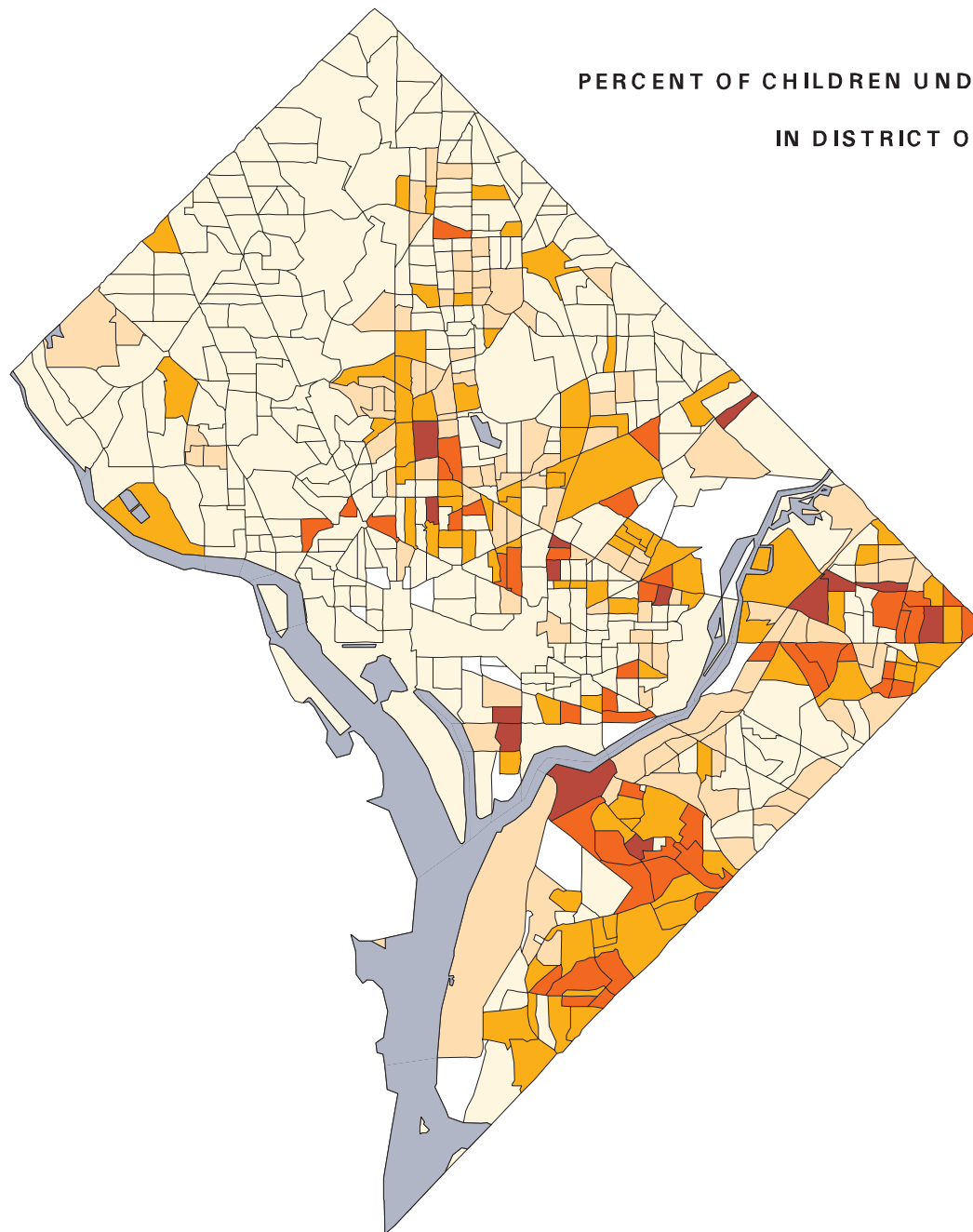
Prepared under EPA Contract Number 68-D1-0073, Work Assignment No. 4-10  
for the Office of Pollution Prevention and Toxics. This map has not been  
subject to Agency review. It is currently being circulated for comments  
of a technical nature.

Contact: Loren Hall, OPPT (202)260-3931

Date: September 06, 1996  
Projection: Albers Equal Area



# PERCENT OF CHILDREN UNDER SIX YEARS BELOW THE POVERTY LEVEL IN DISTRICT OF COLUMBIA BLOCK GROUPS



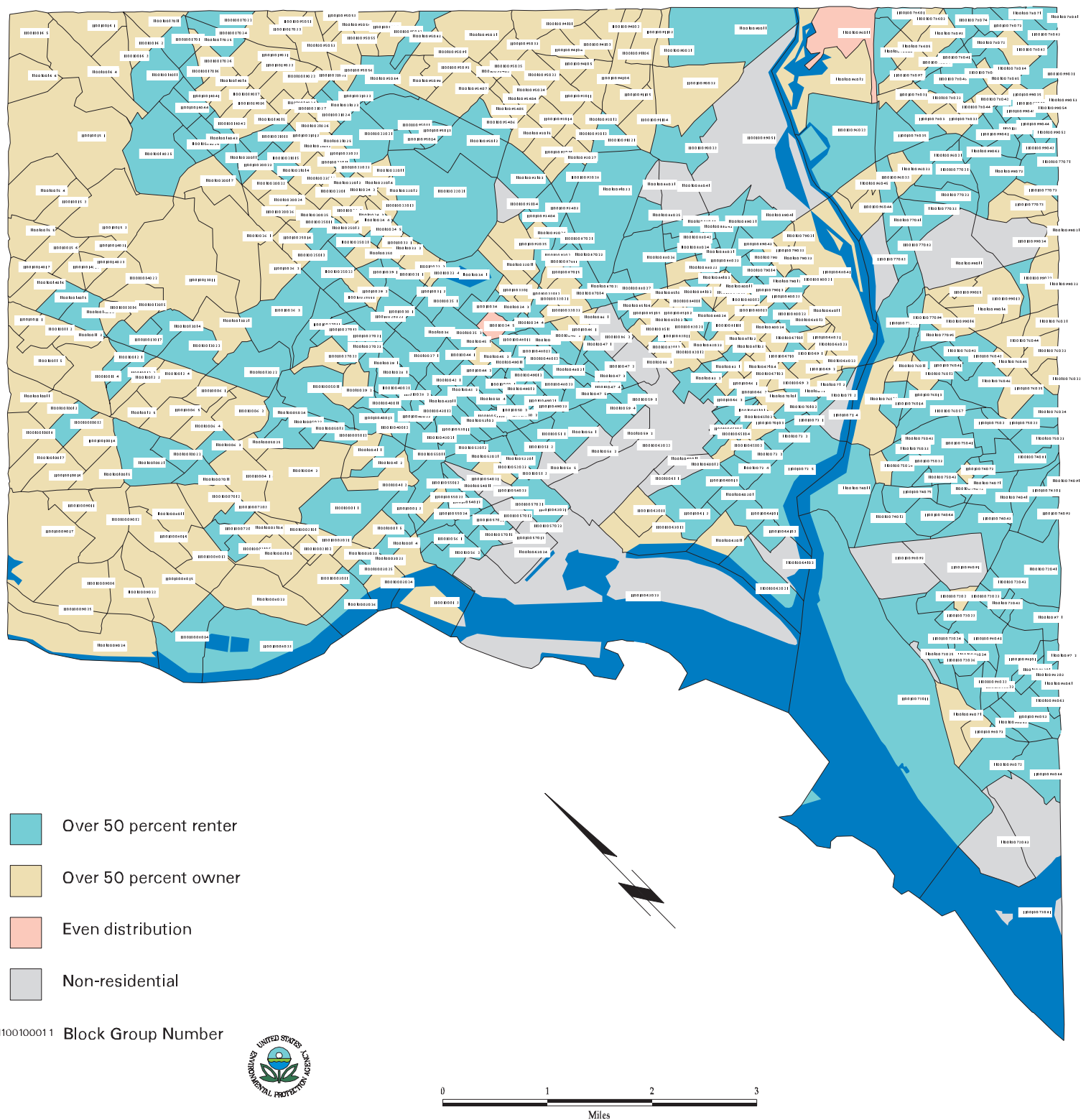
Data Source: 1990 U.S. Bureau of Census Demographic Data:  
Summary Tape Files 3A (Sample Data) for Percent  
of Children Less Than Six Years and Below Poverty:

Prepared under EPA Contract Number 68-D-1-0073, Work Assignment No. 4-10  
for the Office of Pollution Prevention and Toxics. This map has not been  
subject to Agency review. It is currently being circulated for comments  
of a technical nature.  
Contact: Loren Hall, OPPT (202)280-3931

Date: September 06, 1996  
Projection: Albers Equal Area



# Washington D.C. Owned vs. Renter-Occupied by Census Block Group



Source: U.S. Census Bureau Block Groups

Title: Housing Units in DC  
That are owner-occupied and  
Renter-occupied, by 1990 census  
Block group (excludes non-  
Residential census block groups)

Block Group #	% renter- occupied		%owner- occupied	
STCOTRBG	OWNER	RENTER	PERCENTREN	PERCENTOWN
110010001 1	315	411	56.61	43.39
110010001 2	364	457	55.66	44.34
110010001 3	129	29	18.35	81.65
110010001 4	161	188	53.87	46.13
110010001 5	315	236	42.83	57.17
110010002011	15	0	0.00	100.00
110010002021	306	227	42.59	57.41
110010002022	201	147	42.24	57.76
110010002023	56	126	69.23	30.77
110010002024	182	105	36.59	63.41
110010002025	109	130	54.39	45.61
110010002026	50	106	67.95	32.05
110010003101	222	193	46.51	53.49
110010003102	124	62	33.33	66.67
110010003103	322	221	40.70	59.30
110010003104	310	236	43.22	56.78
110010003105	191	758	79.87	20.13
110010004 1	172	37	17.70	82.30
110010004 2	190	87	31.41	68.59
110010005011	232	702	75.16	24.84
110010005012	0	2	100.00	0.00
110010005013	52	862	94.31	5.69
110010005023	251	497	66.44	33.56
110010005024	375	794	67.92	32.08
110010005025	147	5	3.29	96.71
110010006 1	400	328	45.05	54.95
110010006 2	243	233	48.95	51.05
110010006 3	132	153	53.68	46.32
110010006 4	416	94	18.43	81.57
110010006 5	118	17	12.59	87.41
110010007011	137	930	87.16	12.84
110010007012	1247	636	33.78	66.22
110010007203	148	1301	89.79	10.21
110010007205	370	472	56.06	43.94
110010008011	1127	982	46.56	53.44
110010008012	63	0	0.00	100.00
110010008014	155	179	53.59	46.41
110010008015	301	25	7.67	92.33
110010008016	233	12	4.90	95.10



110010008022	277	111	28.61	71.39
110010008023	367	495	57.42	42.58
110010009011	171	69	28.75	71.25
110010009012	133	32	19.39	80.61
110010009016	440	84	16.03	83.97
110010009017	369	10	2.64	97.36
110010009023	257	30	10.45	89.55
110010009024	129	81	38.57	61.43
110010009025	244	48	16.44	83.56
110010010011	172	108	38.57	61.43
110010010012	153	69	31.08	68.92
110010010013	238	262	52.40	47.60
110010010014	268	60	18.29	81.71
110010010015	138	0	0.00	100.00
110010010016	366	26	6.63	93.37
110010010017	308	44	12.50	87.50
110010010018	222	64	22.38	77.62
110010010021	301	953	76.00	24.00
110010010022	229	732	76.17	23.83
110010011 1	144	8	5.26	94.74
110010011 2	406	295	42.08	57.92
110010011 3	176	118	40.14	59.86
110010011 4	170	72	29.75	70.25
110010011 5	357	101	22.05	77.95
110010012 1	501	640	56.09	43.91
110010012 2	136	358	72.47	27.53
110010012 3	174	105	37.63	62.37
110010012 4	138	18	11.54	88.46
110010012 5	256	157	38.01	61.99
110010013011	83	12	12.63	87.37
110010013014	100	512	83.66	16.34
110010013015	154	0	0.00	100.00
110010013016	107	0	0.00	100.00
110010013017	185	871	82.48	17.52
110010013021	55	0	0.00	100.00
110010013022	559	1774	76.04	23.96
110010013023	723	1254	63.43	36.57
110010014013	171	9	5.00	95.00
110010014015	188	630	77.02	22.98
110010014016	232	15	6.07	93.93
110010014017	113	51	31.10	68.90
110010014021	130	19	12.75	87.25
110010014022	130	10	7.14	92.86
110010014023	185	28	13.15	86.85
110010014024	308	389	55.81	44.19

110010015 1	330	0	0.00	100.00
110010015 2	223	18	7.47	92.53
110010015 3	283	175	38.21	61.79
110010015 4	506	65	11.38	88.62
110010015 5	302	38	11.18	88.82
110010015 6	254	37	12.71	87.29
110010016 1	384	21	5.19	94.81
110010016 2	248	98	28.32	71.68
110010016 3	336	23	6.41	93.59
110010016 4	216	6	2.70	97.30
110010016 5	176	18	9.28	90.72
110010016 6	98	0	0.00	100.00
110010017011	316	189	37.43	62.57
110010017015	188	270	58.95	41.05
110010017016	98	141	59.00	41.00
110010017022	142	166	53.90	46.10
110010017023	292	29	9.03	90.97
110010017024	124	136	52.31	47.69
110010017025	25	0	0.00	100.00
110010017026	146	18	10.98	89.02
110010018011	0	9	100.00	0.00
110010018035	184	293	61.43	38.57
110010018036	97	929	90.55	9.45
110010018041	124	181	59.34	40.66
110010018042	34	79	69.91	30.09
110010018043	235	740	75.90	24.10
110010018044	169	360	68.05	31.95
110010019015	220	176	44.44	55.56
110010019016	303	70	18.77	81.23
110010019017	396	40	9.17	90.83
110010019018	276	7	2.47	97.53
110010019021	100	29	22.48	77.52
110010019022	177	35	16.51	83.49
110010019023	283	90	24.13	75.87
110010019024	201	0	0.00	100.00
110010020011	50	593	92.22	7.78
110010020017	277	115	29.34	70.66
110010020022	251	279	52.64	47.36
110010020023	264	26	8.97	91.03
110010020024	151	39	20.53	79.47
110010020025	131	82	38.50	61.50
110010020026	86	21	19.63	80.37
110010021011	277	337	54.89	45.11
110010021012	64	374	85.39	14.61
110010021013	322	86	21.08	78.92

110010021014	126	175	58.14	41.86
110010021015	95	187	66.31	33.69
110010021021	137	43	23.89	76.11
110010021022	172	273	61.35	38.65
110010021023	150	164	52.23	47.77
110010021024	219	99	31.13	68.87
110010021025	175	80	31.37	68.63
110010021026	212	192	47.52	52.48
110010021027	105	100	48.78	51.22
110010022011	397	62	13.51	86.49
110010022012	156	13	7.69	92.31
110010022013	232	23	9.02	90.98
110010022014	159	80	33.47	66.53
110010022021	275	473	63.24	36.76
110010022022	137	159	53.72	46.28
110010022023	229	88	27.76	72.24
110010023011	331	197	37.31	62.69
110010023012	153	67	30.45	69.55
110010023013	150	19	11.24	88.76
110010023014	166	17	9.29	90.71
110010023021	144	354	71.08	28.92
110010024 1	120	82	40.59	59.41
110010024 2	154	38	19.79	80.21
110010024 3	192	37	16.16	83.84
110010024 4	216	126	36.84	63.16
110010024 5	157	170	51.99	48.01
110010025011	105	99	48.53	51.47
110010025012	47	93	66.43	33.57
110010025013	233	68	22.59	77.41
110010025014	119	31	20.67	79.33
110010025021	163	256	61.10	38.90
110010025022	227	218	48.99	51.01
110010025023	366	667	64.57	35.43
110010026 1	131	11	7.75	92.25
110010026 2	317	25	7.31	92.69
110010026 3	222	282	55.95	44.05
110010027011	447	943	67.84	32.16
110010027012	152	578	79.18	20.82
110010027021	79	819	91.20	8.80
110010027022	392	618	61.19	38.81
110010027023	329	201	37.92	62.08
110010028011	230	1166	83.52	16.48
110010028022	136	1628	92.29	7.71
110010029 1	258	552	68.15	31.85
110010029 2	321	309	49.05	50.95

110010030 1	219	836	79.24	20.76
110010031 1	357	411	53.52	46.48
110010031 2	102	103	50.24	49.76
110010032 1	244	124	33.70	66.30
110010032 2	197	166	45.73	54.27
110010032 3	444	402	47.52	52.48
110010032 4	54	31	36.47	63.53
110010033011	274	74	21.26	78.74
110010033012	208	153	42.38	57.62
110010033013	177	151	46.04	53.96
110010033021	179	221	55.25	44.75
110010033022	200	91	31.27	68.73
110010034 1	38	187	83.11	16.89
110010034 2	0	12	100.00	0.00
110010034 3	120	352	74.58	25.42
110010034 4	151	165	52.22	47.78
110010034 5	81	81	50.00	50.00
110010035 1	145	401	73.44	26.56
110010035 2	43	316	88.02	11.98
110010036 1	249	1428	85.15	14.85
110010037 1	91	1754	95.07	4.93
110010038 1	140	1210	89.63	10.37
110010038 2	276	640	69.87	30.13
110010039 1	139	1383	90.87	9.13
110010039 2	602	559	48.15	51.85
110010040011	286	435	60.33	39.67
110010040012	268	158	37.09	62.91
110010040013	228	577	71.68	28.32
110010040021	132	254	65.80	34.20
110010040022	458	988	68.33	31.67
110010041 1	171	137	44.48	55.52
110010041 2	375	613	62.04	37.96
110010041 3	159	91	36.40	63.60
110010042011	176	838	82.64	17.36
110010042012	410	619	60.16	39.84
110010042021	467	1259	72.94	27.06
110010043 1	165	1007	85.92	14.08
110010043 2	208	417	66.72	33.28
110010044 1	142	150	51.37	48.63
110010044 2	119	219	64.79	35.21
110010045 1	38	78	67.24	32.76
110010045 2	169	131	43.67	56.33
110010046 1	205	186	47.57	52.43
110010046 2	211	323	60.49	39.51
110010046 3	108	130	54.62	45.38

110010047 1	63	302	82.74	17.26
110010047 2	30	653	95.61	4.39
110010047 3	0	192	100.00	0.00
110010047 4	0	128	100.00	0.00
110010047 5	0	338	100.00	0.00
110010048011	35	153	81.38	18.62
110010048012	150	270	64.29	35.71
110010048013	90	191	67.97	32.03
110010048021	113	364	76.31	23.69
110010048022	40	735	94.84	5.16
110010049011	96	348	78.38	21.62
110010049012	51	141	73.44	26.56
110010049013	19	63	76.83	23.17
110010049021	50	463	90.25	9.75
110010049022	5	138	96.50	3.50
110010050 1	75	192	71.91	28.09
110010050 2	198	1742	89.79	10.21
110010050 3	35	478	93.18	6.82
110010050 4	155	222	58.89	41.11
110010051 1	0	286	100.00	0.00
110010051 2	21	206	90.75	9.25
110010051 3	0	0		
110010052101	335	1492	81.66	18.34
110010052102	194	546	73.78	26.22
110010052201	0	550	100.00	0.00
110010053011	573	1027	64.19	35.81
110010053012	530	1244	70.12	29.88
110010053021	49	50	50.51	49.49
110010053022	15	7	31.82	68.18
110010054011	42	70	62.50	37.50
110010054012	11	671	98.39	1.61
110010054021	0	0		
110010054022	0	0		
110010055011	44	106	70.67	29.33
110010055012	484	1137	70.14	29.86
110010055023	241	208	46.33	53.67
110010055024	242	287	54.25	45.75
110010056 1	382	1004	72.44	27.56
110010056 2	919	1148	55.54	44.46
110010057011	53	376	87.65	12.35
110010057012	62	572	90.22	9.78
110010057013	0	0		
110010057015	14	391	96.54	3.46
110010057021	0	0		
110010057022	0	0		

110010058 1	23	233	91.02	8.98
110010058 2	0	0		
110010058 5	0	0		
110010059 1	0	279	100.00	0.00
110010059 2	0	0		
110010059 4	17	364	95.54	4.46
110010060011	0	0		
110010060012	0	0		
110010060013	256	1103	81.16	18.84
110010060201	0	179	100.00	0.00
110010061 1	0	0		
110010061 2	314	1044	76.88	23.12
110010062011	6	0	0.00	100.00
110010062012	25	0	0.00	100.00
110010062021	0	2	100.00	0.00
110010062022	0	0		
110010062023	0	0		
110010062024	0	0		
110010063011	1641	771	31.97	68.03
110010063021	0	85	100.00	0.00
110010064101	116	655	84.95	15.05
110010064102	8	158	95.18	4.82
110010064103	0	0		
110010065101	129	272	67.83	32.17
110010065102	104	199	65.68	34.32
110010065103	109	74	40.44	59.56
110010065104	109	244	69.12	30.88
110010065105	32	100	75.76	24.24
110010066 1	231	226	49.45	50.55
110010066 2	109	111	50.45	49.55
110010066 3	125	173	58.05	41.95
110010067101	251	208	45.32	54.68
110010067102	313	240	43.40	56.60
110010067103	215	172	44.44	55.56
110010067104	175	93	34.70	65.30
110010068011	310	265	46.09	53.91
110010068012	142	176	55.35	44.65
110010068021	205	138	40.23	59.77
110010068022	192	96	33.33	66.67
110010068023	156	72	31.58	68.42
110010068041	14	0	0.00	100.00
110010069 1	150	249	62.41	37.59
110010069 2	161	92	36.36	63.64
110010069 3	173	123	41.55	58.45
110010070101	133	105	44.12	55.88

110010070102	74	106	58.89	41.11
110010070103	251	240	48.88	51.12
110010071 1	93	436	82.42	17.58
110010071 2	111	103	48.13	51.87
110010071 3	84	273	76.47	23.53
110010071 4	0	0		
110010072 1	21	38	64.41	35.59
110010072 2	9	528	98.32	1.68
110010072 3	7	128	94.81	5.19
110010072 4	0	24	100.00	0.00
110010072 5	0	36	100.00	0.00
110010073011	16	1830	99.13	0.87
110010073021	99	311	75.85	24.15
110010073022	92	51	35.66	64.34
110010073023	50	85	62.96	37.04
110010073024	264	546	67.41	32.59
110010073025	0	0		
110010073026	14	35	71.43	28.57
110010073041	87	585	87.05	12.95
110010073042	124	222	64.16	35.84
110010073043	75	344	82.10	17.90
110010073081	0	0		
110010073082	0	0		
110010074011	5	21	80.77	19.23
110010074012	59	746	92.67	7.33
110010074041	15	642	97.72	2.28
110010074042	86	493	85.15	14.85
110010074064	72	602	89.32	10.68
110010074071	5	153	96.84	3.16
110010074072	69	6	8.00	92.00
110010074073	20	96	82.76	17.24
110010074075	215	574	72.75	27.25
110010074081	108	908	89.37	10.63
110010074091	176	200	53.19	46.81
110010074092	49	797	94.21	5.79
110010074301	67	847	92.67	7.33
110010075021	80	558	87.46	12.54
110010075022	8	525	98.50	1.50
110010075023	23	184	88.89	11.11
110010075032	198	466	70.18	29.82
110010075033	44	144	76.60	23.40
110010075034	81	53	39.55	60.45
110010075041	122	671	84.62	15.38
110010075042	22	145	86.83	13.17
110010075043	0	28	100.00	0.00

110010076011	160	105	39.62	60.38
110010076012	156	63	28.77	71.23
110010076013	86	204	70.34	29.66
110010076014	252	609	70.73	29.27
110010076015	200	90	31.03	68.97
110010076031	602	287	32.28	67.72
110010076032	166	0	0.00	100.00
110010076033	90	0	0.00	100.00
110010076034	217	431	66.51	33.49
110010076035	186	135	42.06	57.94
110010076041	118	545	82.20	17.80
110010076042	72	370	83.71	16.29
110010076043	40	131	76.61	23.39
110010076044	92	9	8.91	91.09
110010076045	116	0	0.00	100.00
110010076046	197	289	59.47	40.53
110010076057	387	1370	77.97	22.03
110010077031	184	260	58.56	41.44
110010077032	170	266	61.01	38.99
110010077033	26	1341	98.10	1.90
110010077071	319	557	63.58	36.42
110010077072	201	21	9.46	90.54
110010077073	335	39	10.43	89.57
110010077081	73	512	87.52	12.48
110010077082	178	485	73.15	26.85
110010077083	0	0		
110010077093	54	145	72.86	27.14
110010077094	151	370	71.02	28.98
110010077095	93	220	70.29	29.71
110010078031	121	92	43.19	56.81
110010078032	202	78	27.86	72.14
110010078033	182	63	25.71	74.29
110010078034	155	518	76.97	23.03
110010078035	63	137	68.50	31.50
110010078041	35	50	58.82	41.18
110010078042	117	442	79.07	20.93
110010078043	90	10	10.00	90.00
110010078044	183	47	20.43	79.57
110010078045	55	145	72.50	27.50
110010078071	29	180	86.12	13.88
110010078072	115	122	51.48	48.52
110010078073	22	26	54.17	45.83
110010078074	165	177	51.75	48.25
110010078081	63	171	73.08	26.92
110010078082	60	378	86.30	13.70



110010078083	199	138	40.95	59.05
110010078084	148	252	63.00	37.00
110010078085	120	53	30.64	69.36
110010078093	432	282	39.50	60.50
110010078094	135	124	47.88	52.12
110010078097	70	27	27.84	72.16
110010078601	89	266	74.93	25.07
110010078602	127	52	29.05	70.95
110010078605	154	105	40.54	59.46
110010078606	67	135	66.83	33.17
110010079011	60	223	78.80	21.20
110010079012	173	225	56.53	43.47
110010079013	160	270	62.79	37.21
110010079014	78	346	81.60	18.40
110010079031	214	99	31.63	68.37
110010079032	178	112	38.62	61.38
110010079033	106	82	43.62	56.38
110010080011	154	117	43.17	56.83
110010080012	367	217	37.16	62.84
110010080013	228	31	11.97	88.03
110010080021	10	143	93.46	6.54
110010080022	216	319	59.63	40.37
110010080023	123	110	47.21	52.79
110010080024	362	271	42.81	57.19
110010081101	126	181	58.96	41.04
110010081102	283	238	45.68	54.32
110010081103	193	207	51.75	48.25
110010082 1	217	230	51.45	48.55
110010082 2	314	733	70.01	29.99
110010083011	50	75	60.00	40.00
110010083012	478	469	49.52	50.48
110010083013	15	7	31.82	68.18
110010083021	52	54	50.94	49.06
110010083022	397	311	43.93	56.07
110010084023	127	124	49.40	50.60
110010084024	240	639	72.70	27.30
110010084101	45	29	39.19	60.81
110010084102	220	30	12.00	88.00
110010084103	79	87	52.41	47.59
110010085101	208	99	32.25	67.75
110010085102	138	114	45.24	54.76
110010085103	114	108	48.65	51.35
110010085104	68	50	42.37	57.63
110010085105	109	120	52.40	47.60
110010085106	24	26	52.00	48.00

110010086 1	21	17	44.74	55.26
110010086 2	0	0		
110010086 3	0	0		
110010087011	38	9	19.15	80.85
110010087014	275	147	34.83	65.17
110010087015	227	149	39.63	60.37
110010087021	51	150	74.63	25.37
110010087022	90	266	74.72	25.28
110010087023	139	184	56.97	43.03
110010088021	90	235	72.31	27.69
110010088022	178	393	68.83	31.17
110010088023	308	144	31.86	68.14
110010088024	250	285	53.27	46.73
110010088031	0	0		
110010088035	68	333	83.04	16.96
110010088036	0	190	100.00	0.00
110010088037	0	1	100.00	0.00
110010088041	0	0		
110010088042	56	223	79.93	20.07
110010088043	128	409	76.16	23.84
110010088044	54	487	90.02	9.98
110010089031	353	1053	74.89	25.11
110010089041	126	1168	90.26	9.74
110010089042	29	460	94.07	5.93
110010089051	0	0		
110010090011	428	923	68.32	31.68
110010090021	68	4	5.56	94.44
110010090022	214	14	6.14	93.86
110010090023	75	208	73.50	26.50
110010091021	172	173	50.14	49.86
110010091022	475	958	66.85	33.15
110010091102	254	9	3.42	96.58
110010091104	180	37	17.05	82.95
110010091105	127	10	7.30	92.70
110010091106	344	207	37.57	62.43
110010092034	179	67	27.24	72.76
110010092035	210	124	37.13	62.87
110010092036	204	452	68.90	31.10
110010092103	234	344	59.52	40.48
110010092104	0	0		
110010092402	76	844	91.74	8.26
110010092404	36	164	82.00	18.00
110010093011	242	35	12.64	87.36
110010093012	89	46	34.07	65.93
110010093013	93	34	26.77	73.23

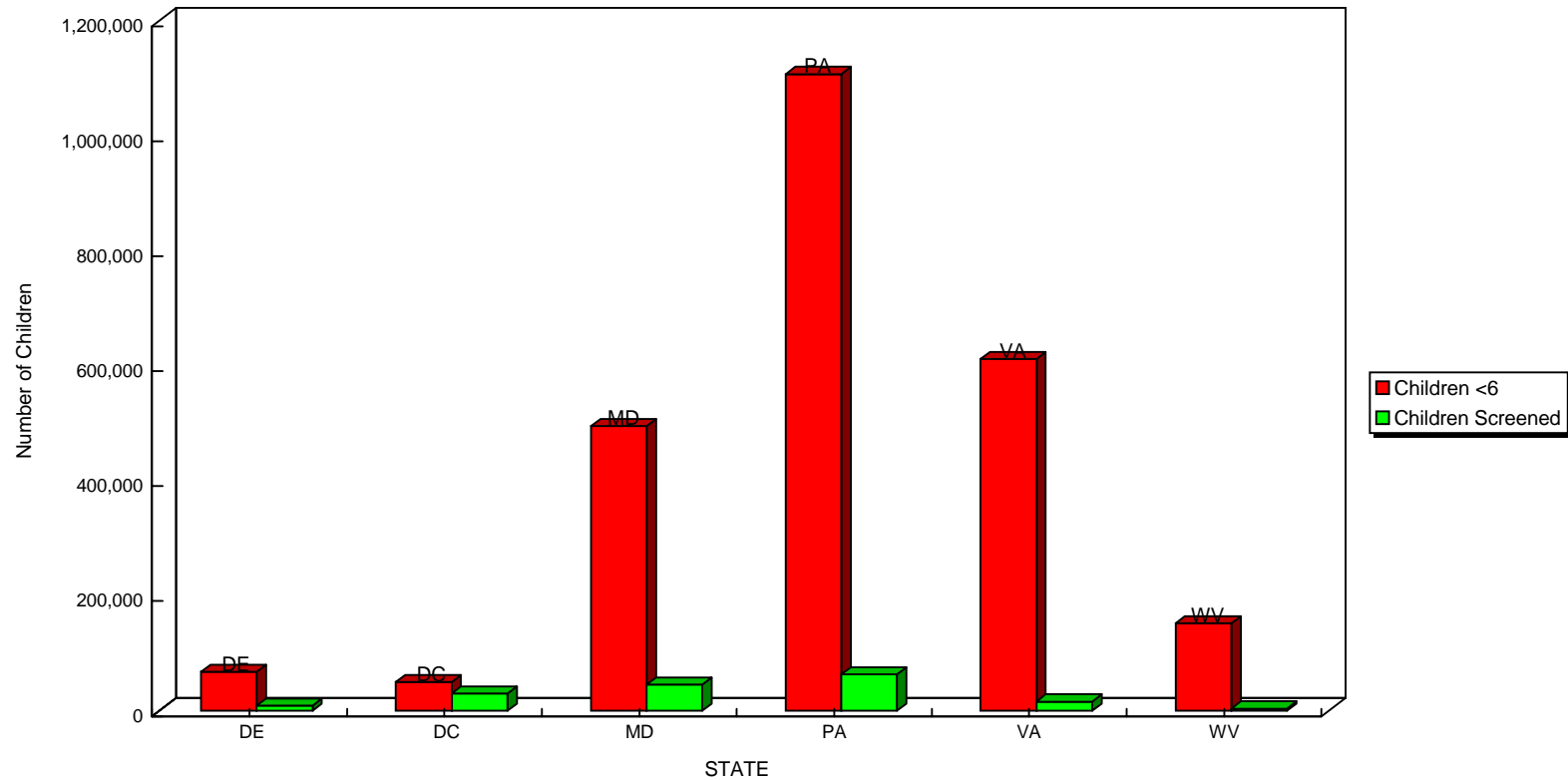
110010093014	231	21	8.33	91.67
110010093015	67	12	15.19	84.81
110010093016	227	47	17.15	82.85
110010093027	204	182	47.15	52.85
110010093028	116	196	62.82	37.18
110010094101	284	0	0.00	100.00
110010094102	155	56	26.54	73.46
110010094103	280	63	18.37	81.63
110010094104	290	53	15.45	84.55
110010094105	174	0	0.00	100.00
110010094106	223	128	36.47	63.53
110010095011	182	761	80.70	19.30
110010095012	0	10	100.00	0.00
110010095013	102	409	80.04	19.96
110010095014	5	438	98.87	1.13
110010095031	612	35	5.41	94.59
110010095032	118	25	17.48	82.52
110010095033	124	9	6.77	93.23
110010095034	118	0	0.00	100.00
110010095035	142	8	5.33	94.67
110010095051	168	0	0.00	100.00
110010095052	177	44	19.91	80.09
110010095053	110	21	16.03	83.97
110010095054	153	0	0.00	100.00
110010095055	243	131	35.03	64.97
110010095056	117	9	7.14	92.86
110010095071	533	77	12.62	87.38
110010095082	515	28	5.16	94.84
110010095083	223	224	50.11	49.89
110010095084	0	330	100.00	0.00
110010095091	436	22	4.80	95.20
110010095092	422	34	7.46	92.54
110010095098	304	44	12.64	87.36
110010095403	100	7	6.54	93.46
110010095404	97	59	37.82	62.18
110010095405	106	69	39.43	60.57
110010095406	110	421	79.28	20.72
110010095407	285	79	21.70	78.30
110010096011	143	143	50.00	50.00
110010096012	200	20	9.09	90.91
110010096023	0	954	100.00	0.00
110010096031	215	658	75.37	24.63
110010096032	272	34	11.11	88.89
110010096033	122	429	77.86	22.14
110010096044	409	166	28.87	71.13

110010096045	240	95	28.36	71.64
110010097 1	215	662	75.48	24.52
110010097 2	46	443	90.59	9.41
110010098032	46	289	86.27	13.73
110010098033	83	463	84.80	15.20
110010098034	42	221	84.03	15.97
110010098041	274	696	71.75	28.25
110010098052	23	26	53.06	46.94
110010098053	63	534	89.45	10.55
110010098061	190	840	81.55	18.45
110010098062	37	1243	97.11	2.89
110010098071	56	40	41.67	58.33
110010098072	178	15	7.77	92.23
110010098073	273	712	72.28	27.72
110010098084	0	1159	100.00	0.00
110010098091	0	0		
110010098092	0	0		
110010098101	149	644	81.21	18.79
110010098201	9	230	96.23	3.77
110010098202	136	358	72.47	27.53
110010099011	0	0		
110010099013	269	0	0.00	100.00
110010099014	221	49	18.15	81.85
110010099015	101	28	21.71	78.29
110010099016	264	64	19.51	80.49
110010099021	129	19	12.84	87.16
110010099022	790	263	24.98	75.02
110010099023	5	11	68.75	31.25
110010099024	0	0		
110010099031	223	836	78.94	21.06
110010099035	170	22	11.46	88.54
110010099043	24	183	88.41	11.59
110010099044	14	305	95.61	4.39
110010099045	9	105	92.11	7.89
110010099046	6	506	98.83	1.17
110010099052	236	165	41.15	58.85
110010099053	75	279	78.81	21.19
110010099054	72	256	78.05	21.95
110010099055	49	175	78.12	21.88
110010099061	218	342	61.07	38.93
110010099062	16	192	92.31	7.69
110010099072	278	790	73.97	26.03

TOTAL                      97,085              152,549                      TOTAL ALL UNITS: 249,634

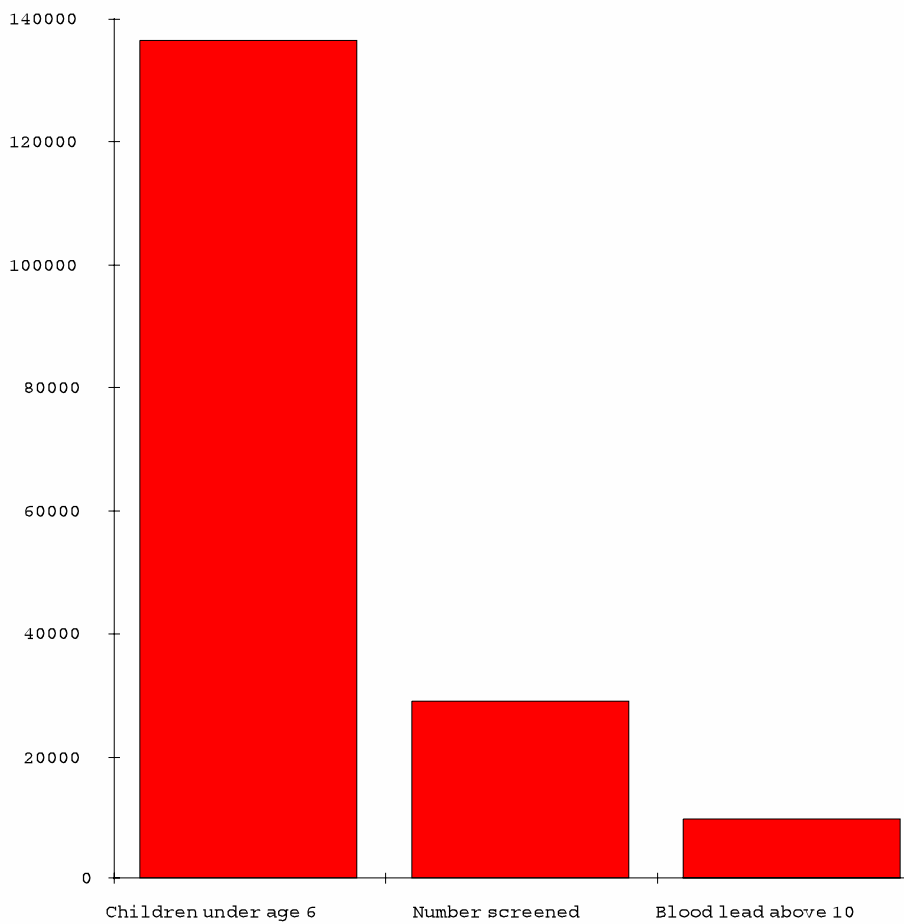
## Number of Children < Age 6 Compared to Those Screened for Lead By State

from July, 1994 through June, 1995





Phila blood screening results - July, 1994 - June, 1995



# Blood Lead Levels of Children Residing in Philadelphia

## by Zip Code

